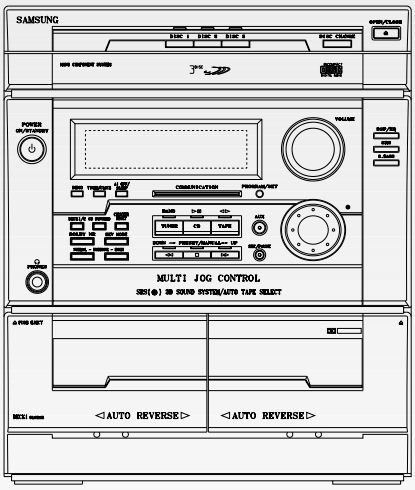
SAMSUNG

# 3 CD CHANGER
# MINI MINI COMPONENT
## MAX-870/880/878/888

# SERVICE Manual

3CD CHANGER MINI COMPONENT

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# 1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

## 1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced.

2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including control knobs and compartment covers.

3. Make sure that there are no cabinet openings through which people--particularly children--might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

4. Design Alteration Warning:
   Never alter or add to the mechanical or electrical design of the unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.

5. Leakage Current Hot Check (Figure 1-1):
   Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANSI C101.1, *Leakage Current for Appliances*), and Underwriters Laboratories (*UL Publication UL1410, 59.7*).

   With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, etc.) and all exposed metal parts. Examples: Handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat.

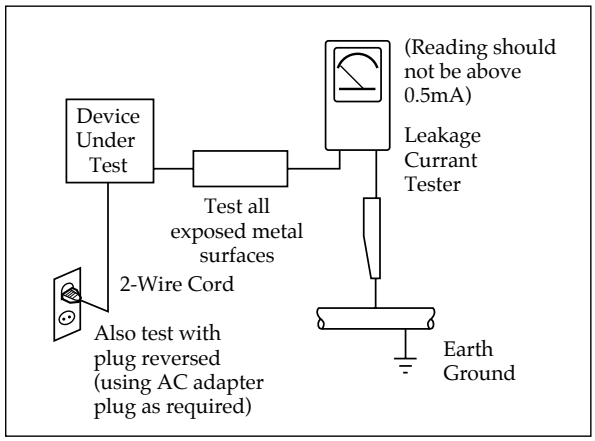

(Reading should not be above 0.5mA)
Device Under Test
Leakage Currant Tester
Test all exposed metal surfaces
2-Wire Cord
Also test with plug reversed (using AC adapter plug as required)
Earth Ground

Fig. 1-1 AC Leakage Test

6. Insulation Resistance Cold Check:
   (1) With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. (2) Set the power switch to ON. (3) Measure the resistance between the shorted AC plug and any exposed metallic parts. Example: Screwheads, antenna, control shafts or handle brackets.

   If any of the exposed metallic parts has a return path to the chassis, the measured resistance should be between 1 and 5.2 megohms. If there is no return path, the measured resistance should be "infinite." If the resistance is outside these limits, a shock hazard might exist. See Figure 1-2

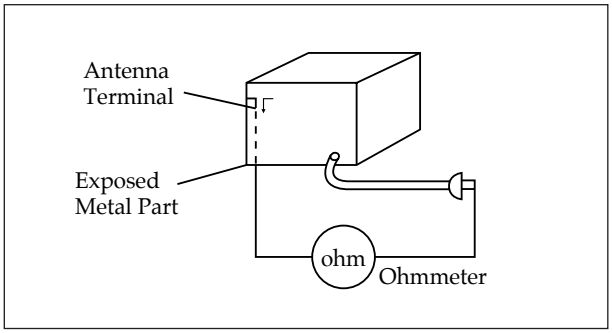



Fig. 1-2 Insulation Resistance Test

## 1-1 Safety Precautions (Continued)

7. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards

8. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that no wires or components touch thermally hot parts.

9. Product Safety Notice:
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original--even if the replacement is rated for higher voltage, wattage, etc.

10 Components that are critical for safety are indicated in the circuit diagram by shading, ⚠ or ⚠ . Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

## 1-2 Servicing Precautions

**Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.**

1. Servicing precautions are printed on the cabinet. Follow them.

2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.

3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring may be clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.

4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.

5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).

6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.

7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.

8. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.

## 1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs). Examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.

2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.

4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.

5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.

6. Use only an anti-static solder removal device. Many solder removal devices are not rated as "anti-static" (these can accumulate sufficient electrical charge to damage ESDs).

7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.

8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.

9. Minimize body motions when handing unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

## 1-4 Special Precautions and Warning Labels for Laser Products

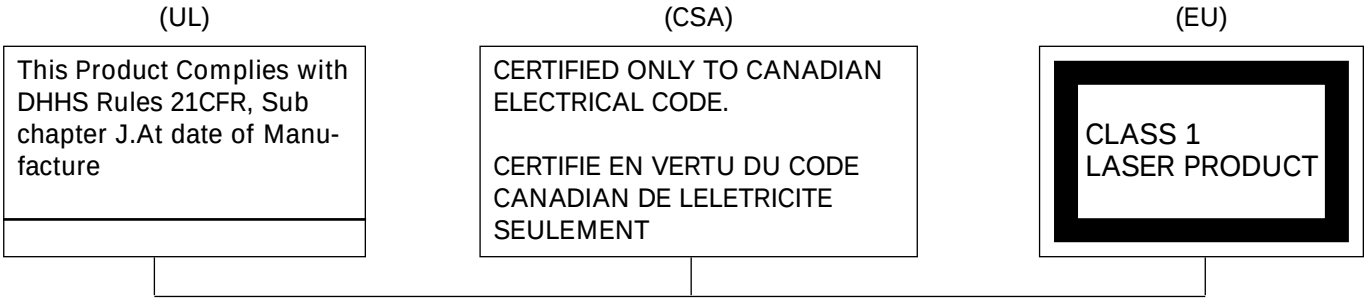

(UL)
This Product Complies with DHHS Rules 21CFR, Sub chapter J.At date of Manu-facture
(CSA)
CERTIFIED ONLY TO CANADIAN ELECTRICAL CODE.
CERTIFIE EN VERTU DU CODE CANADIAN DE LELETRICITE SEULEMENT
(EU)
CLASS 1
LASER PRODUCT

Fig. 1-3 Warning Labels (Location: Enclosure Block)

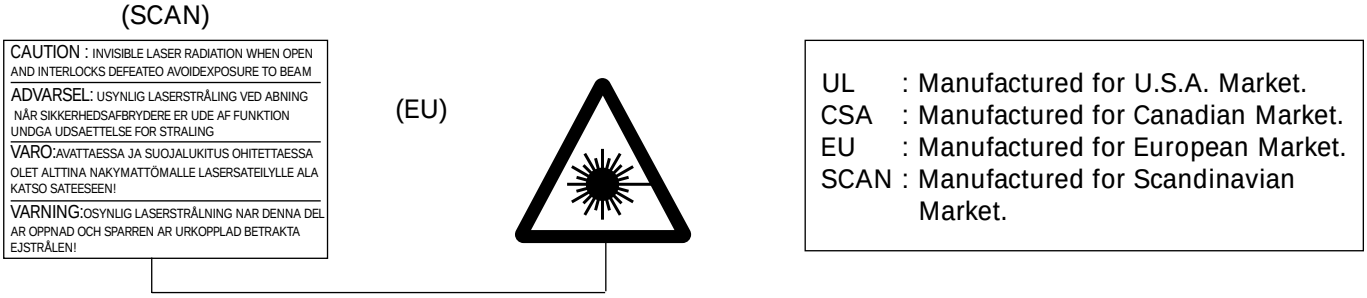

(SCAN)
CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATEO AVOIDEXPOSURE TO BEAM
ADVARSEL: USYNLIG LASERSTRÅLING VED ABNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION UNDGA UDSAETTELSE FOR STRALING
VARO:AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTINA NAKYMATTÖMALLE LASERSATEILYLLE ALA KATSO SATEESEEN!
VARNING:OSYNLIG LASERSTRÅLNING NAR DENNA DEL AR OPPNAD OCH SPARREN AR URKOPPLAD BETRAKTA EJSTRÅLEN!
(EU)
UL : Manufactured for U.S.A. Market.
CSA : Manufactured for Canadian Market.
EU : Manufactured for European Market.
SCAN : Manufactured for Scandinavian Market.

Fig. 1-4 Warning Labels (Location: Disc Clamper, Inner Side of Unit Door or Nearby Unit Chassis )

# 1-4 Special Precautions and Warning Labels for Laser Products (Continued)

### 1-4-1 Warnings

1. When servicing, do not approach the LASER exit with the eye too closely. In case it is necessary to confirm LASER beam emission, be sure to observe from a distance of more than 30 cm from the surface of the objective lens on the optical pick-up block.

2. Do not attempt to handle the objective lens when the DISC is not on the tray.

### 1-4-2 Laser Diode Specifications

Material: GaAs+ GaAlAs
Wavelength: 760-800 nm
Emission Duration: Continuous

Laser Output: 0.2 mw (measured at a 1.6 mm distance from the objective lens surface on the optical pick-up block.)

### 1-4-3 Handling the Optical Pick-up

1. Static electricity from clothing or the body may cause electrostatic breakdown of the laser diode in the Optical Pickup. Follow this procedure:

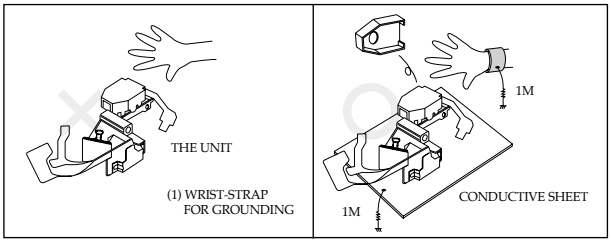
2. Place a conductive sheet on the work bench (i.e., the black sheet used for wrapping repair parts.) Note: The surface of the work bench should be covered by a copper ground plane, which is grounded.

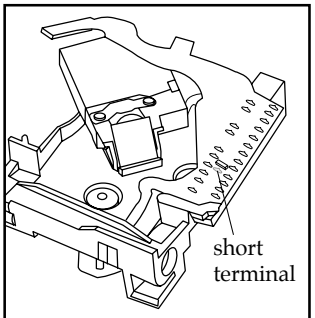
3. The repair technician must wear a wrist strap which is grounded to the copper sheet.

4. To remove the Optical Pickup block: Place the set on the conductive sheet, and momentarily touch the conductive sheet with both hands. (While working, do not allow any electrostatic sources--such as clothes--to touch the unit.)

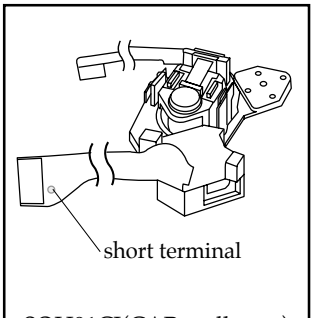
5. Ground the "Short Terminal" (located on the PCB, inside the Pickup Assembly) before replacing the Pickup. This terminal should be shorted whenever the Pickup Assembly is lifted or moved.

6. After replacing the Pickup, reopen the Short Terminal. See diagrams below:

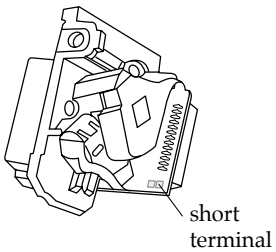


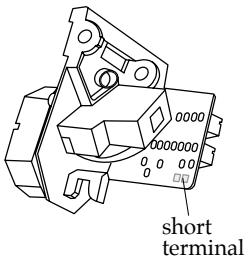
SOH91VI(LDP)



SOH91CI(CAR,walkman)



SOH-A1
(CMS-V10,CMS-V30)



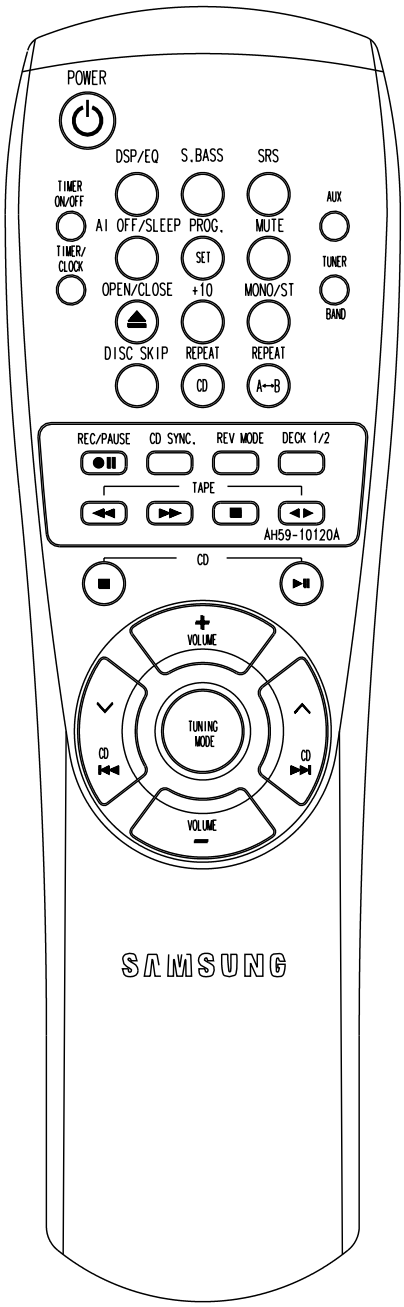
SOH94T4N
(CMS-V10,CMS-V30)

# 2. Product Specfications

| | | | |
|---|---|---|---|
| General | | Power source<br>Power consumption<br>- MAX-870<br>- MAX-880<br>Dimensions (mm) | AC 230V 50HZ (option)<br><br>340W<br>550W<br>270(W) x 317(H) x 340(D) |
| Amp | | Power output (Front)<br>- MAX-870<br>- MAX-880<br>Total harmonic distortion<br>Frequency response<br>Signal to noise ratio<br>Channel separation<br>Input sensitivity<br>- Mic<br>- Aux | <br>100W / Ch(6Ω) (THD 10%)<br>150W / Ch(6Ω) (THD 10%)<br>0.08% (1kHz)<br>30Hz ~ 30kHz<br>75 dB<br>50 dB (1kHz)<br><br>5mV (±3)<br>400mV (±80) |
| Tuner | FM | Frequency range<br>Usable sensitivity<br>Signal to noise ratio<br>IF rejection ratio<br>Total harmonic distoration<br>Separation (Stereo) | 87.5 ~ 108MHz<br>6 dB<br>62 dB<br>60 dB<br>0.3%<br>35 dB |
| | MW<br>(AM) | Frequency range<br>Usable sensitivity<br>Signal to noise ratio<br>IF rejection ratio<br>Total harmonic distortion | 522 ~ 1611KHz<br>54 dB<br>40 dB<br>30 dB<br>2% |
| | LW<br>(option) | Frequency range<br>Usable sensitivity<br>Signal to noise ratio | 146 ~ 290KHz<br>60 dB<br>35 dB |
| Cassette | | Frequency range<br>WOW FLUTTER<br>Erasing effect<br>Signal to noise ratio<br>Total harmonic distortion | 125Hz ~ 12.5KHz(-5dB)<br>0.15%<br>60 dB<br>40 dB<br>2.5% |
| Compact Disc | | Frequency response<br>Signal to noise ratio<br>Channel separation<br>Total harmonic distortion<br><br><br>Audio Output | 20Hz ~ 20KHz(±1dB)<br>90 dB(1kHz)<br>75 dB(1kHz)<br>0.1% (100Hz)<br>0.05%(1kHz)<br>0.2% (10kHz)<br>1V (1kHz 0dB) |

Specifications are subject to change without notice.

# Remote Control



# 3. Disassembly and Reassembly

## 3-1 Cabinet-Top

* If power is connected ;

1. Turn power on and open the CD ,push the Door-CD in the direction of arrow to remove.
2. Remove 7 screws ①, ② holding the Cabinet-Top.
   Lift the back of the Cabinet-Top and shade it to the rear to remove.

* If power is not connected ;

Remove the Cabinet-Top and Turn the Gear the clockwise using the hand as shown in figure 3-1-1.
Open the Door-CD and pull the Tray in the direction of arrow ②.

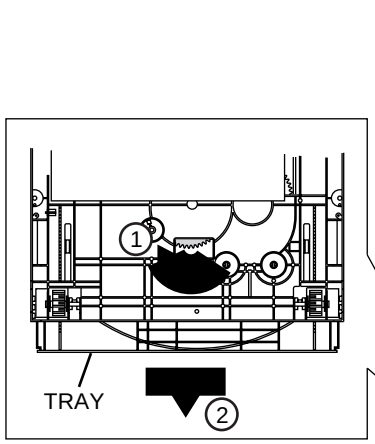



Figure 3-1-1

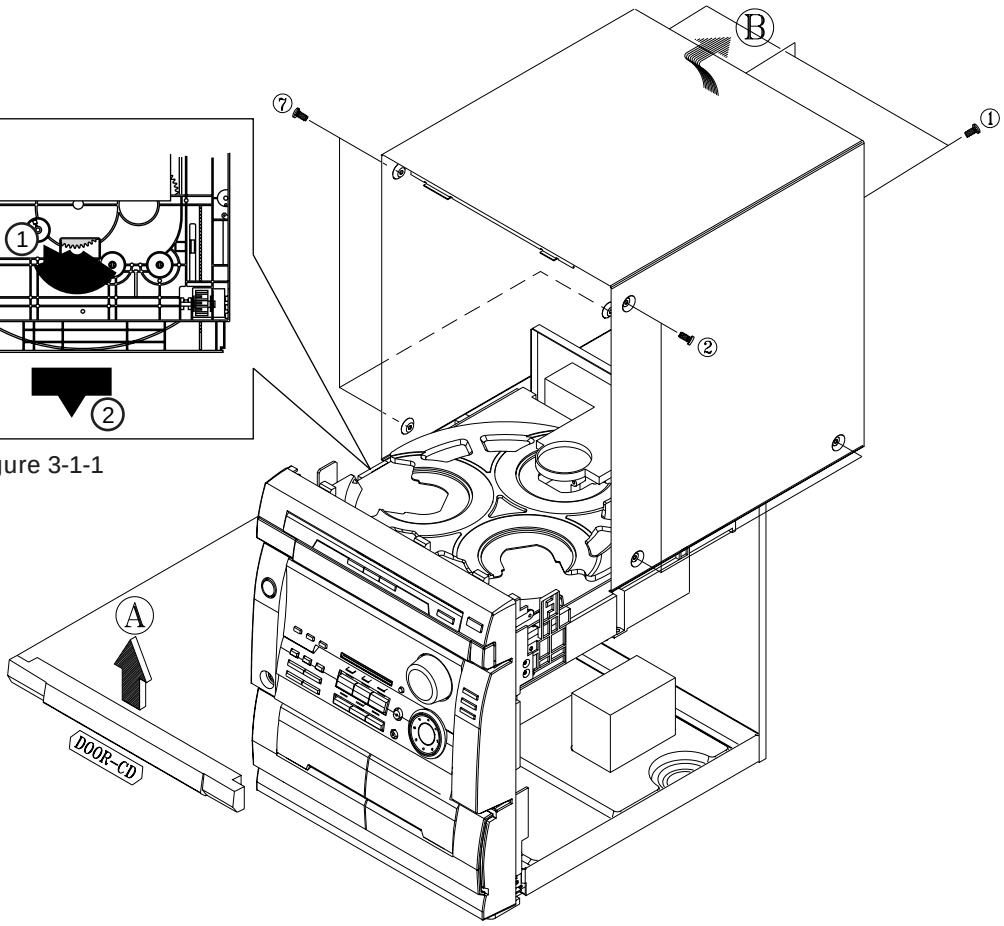



Figure 3-1

## 3-2 CD-Mecha, Door-CD

1. Remove 4 screws ③, ④.
2. Lift the back of the CD-Mecha to remove.

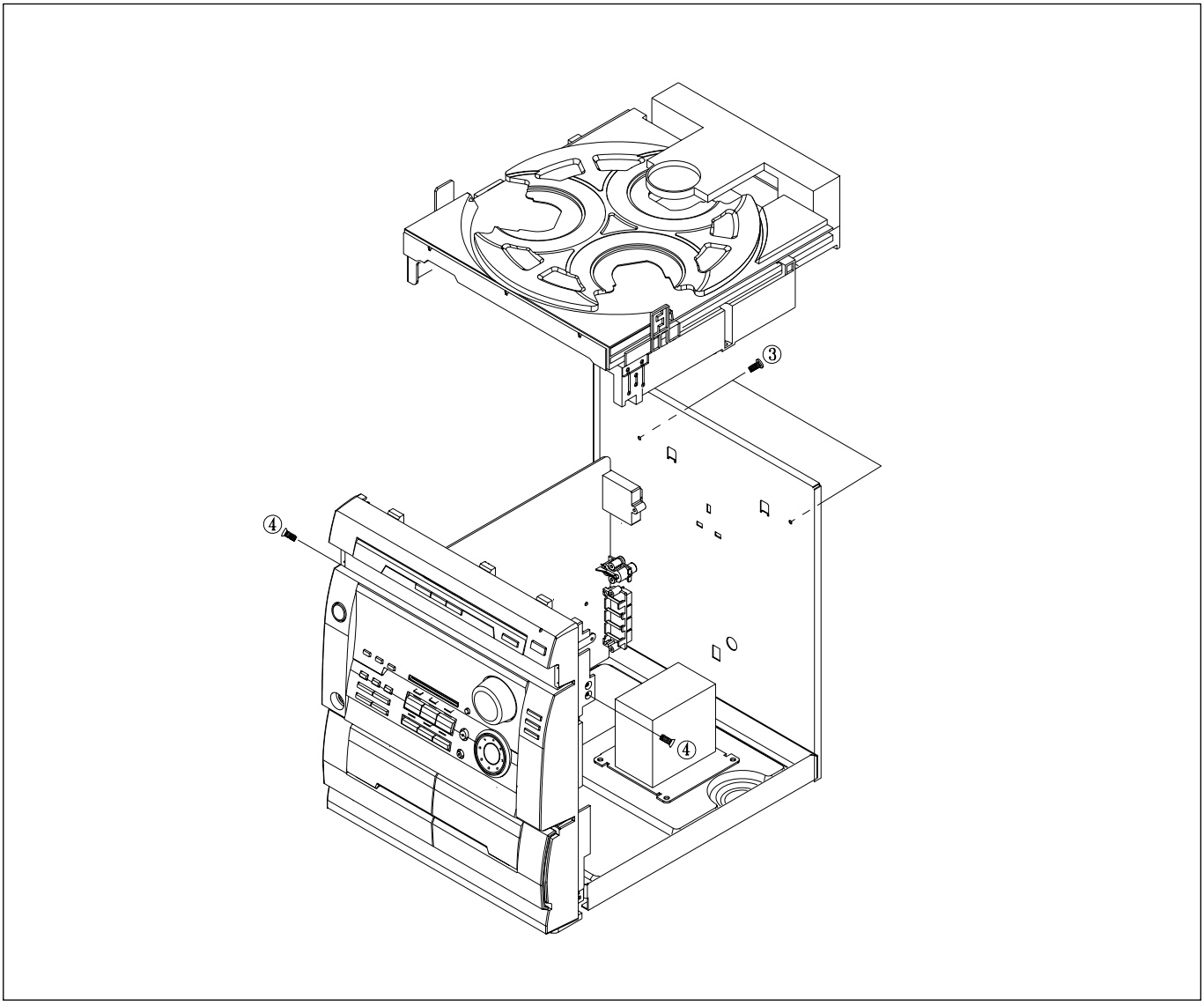



Figure 3-2

## 3-3 Cabinet-Rear and Main PCB

1. Remove 9 screws ⑤.
2. Lift the Cabinet-Rear and slide it to the rear by releasing the hook of Cabinet-Bottom.
3. Remove 2 screws ⑥ and slide the Main PCB to the rear to remove.

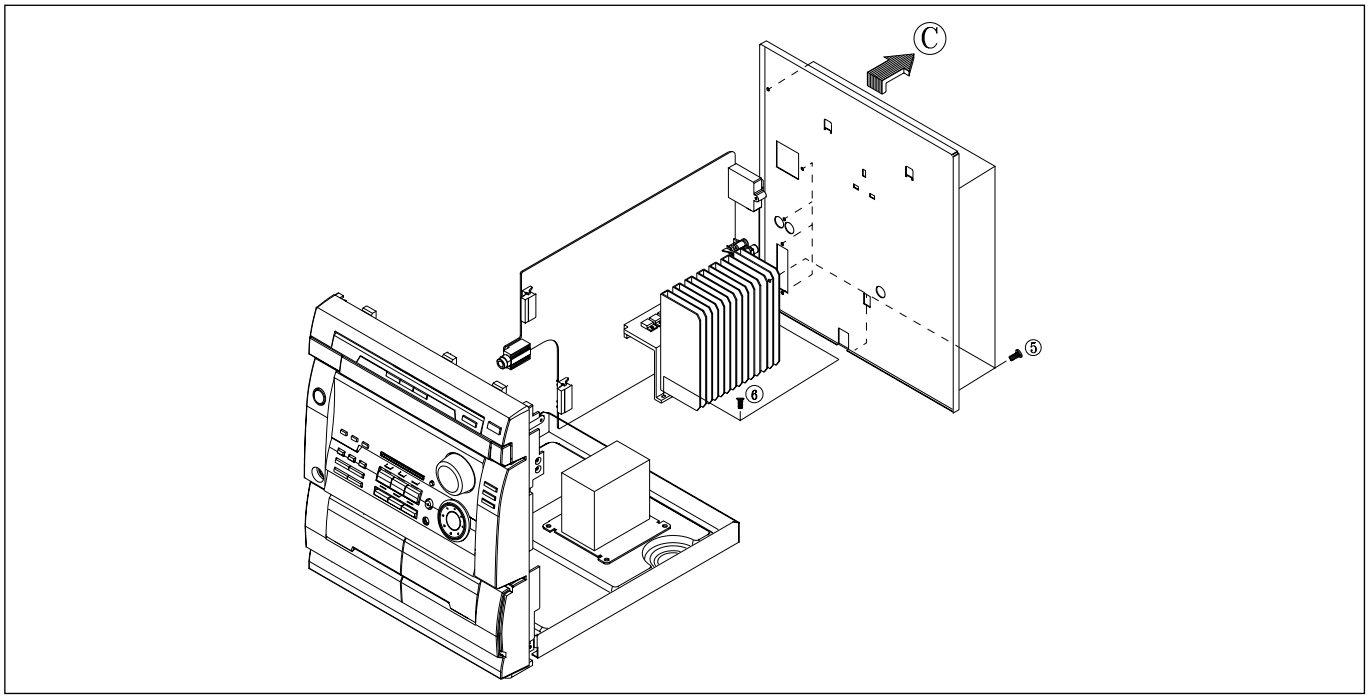



Figure 3-3

## 3-4 Cabinet-Front and Cabinet-Bottom

1. Remove 2 screws ⑦.
2. Slide it to the front by releasing two hooks on the bottom of Cabinet-Front to remove.

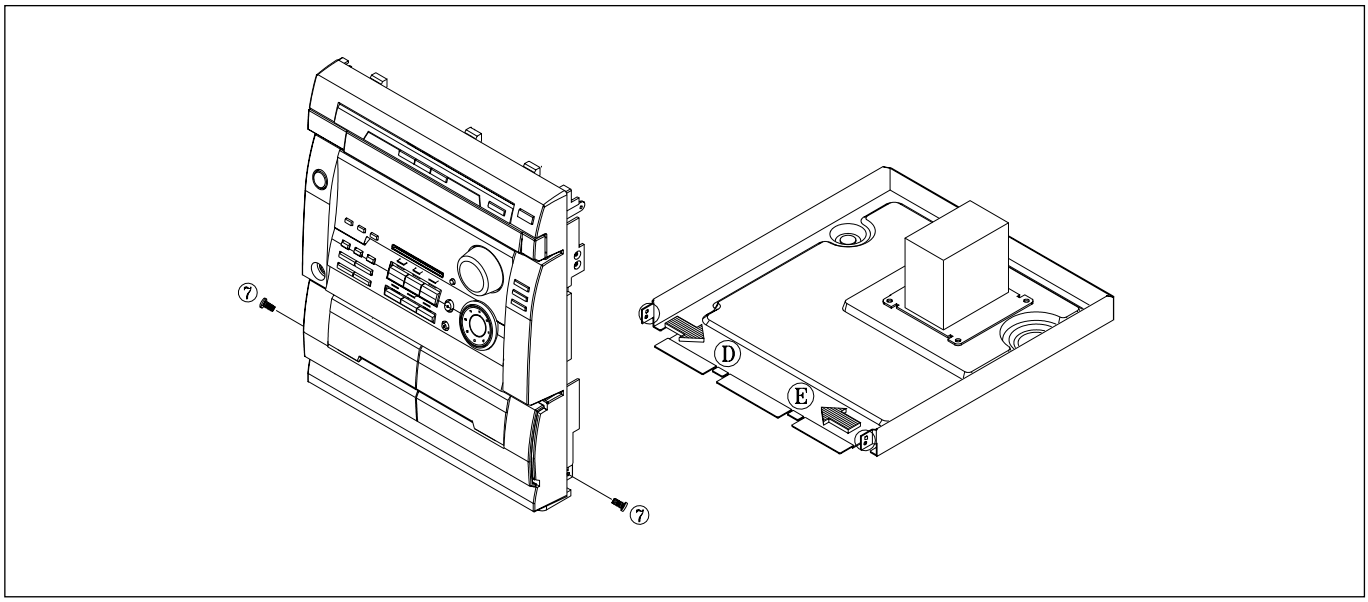



Figure 3-4

# 3-5 CD Mecha

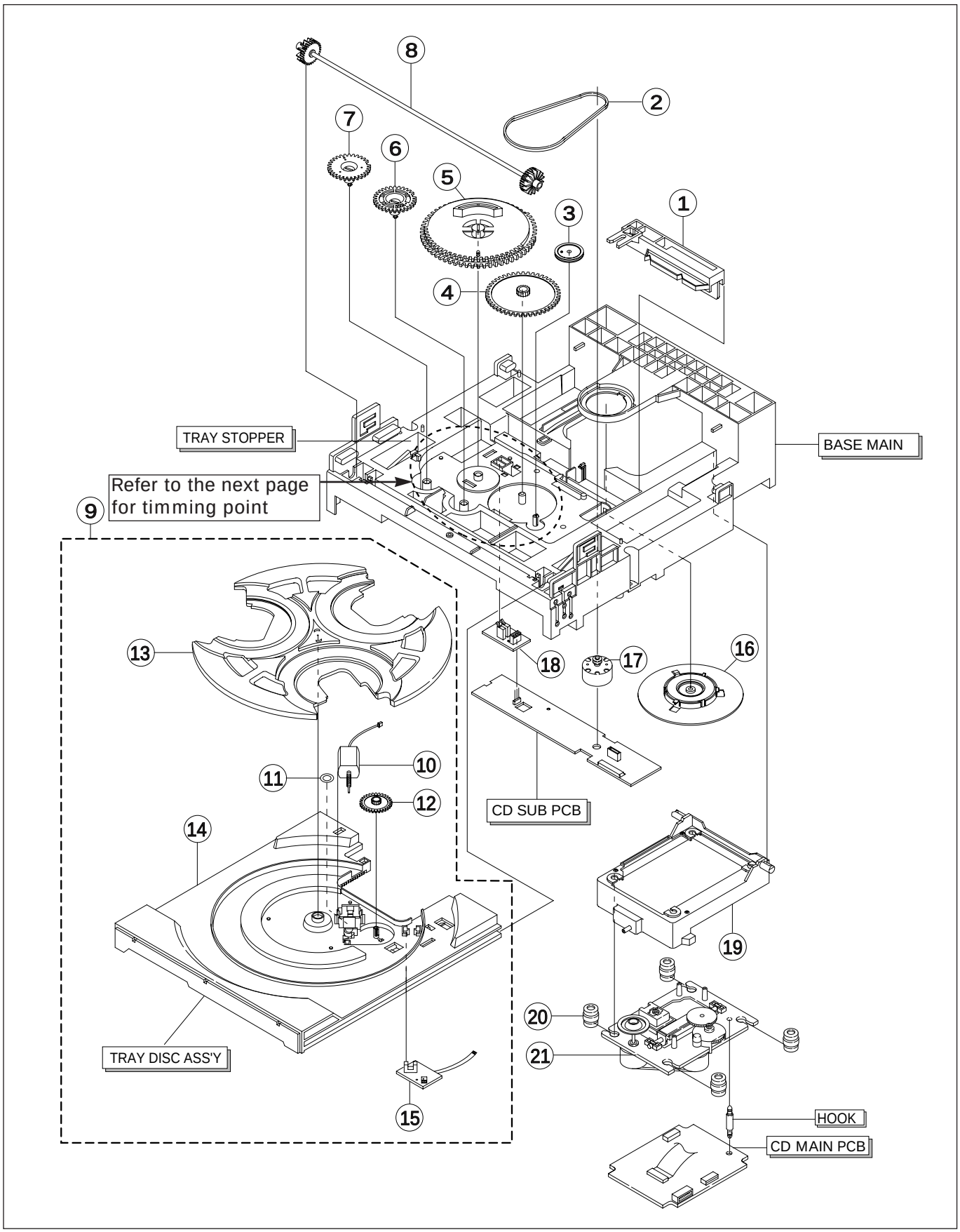



Figure 3-5

## 3-5 CD Mecha Continued

*When removing, take extreme care not to damage the hook.
1. Open the Tray Disc Ass'y by turning the Gear-Load(⑤) in the direction of open,then remove the Wire-Tray(㉕).
2. Remove two Tray-Stopper and tray.

### 3-5-1 Tray Disassembly

1. Remove the Tray-Roulette(⑬) from the Tray-Disc Ass'y(⑭) by releasing the hook.
2. Remove the PCB-Sensor Ass'y(⑮) from the tray by releasing the hook.
3. Remove the Worm-Motor Ass'y(⑩)from the Tray-Disc Ass'y(⑭).
4. Remove the Cushion-Motor(⑪) from the Tray.
5. Remove the Gear-Roulette(⑫) from the Tray-Disc Ass'y(⑭) by releasing the hook.

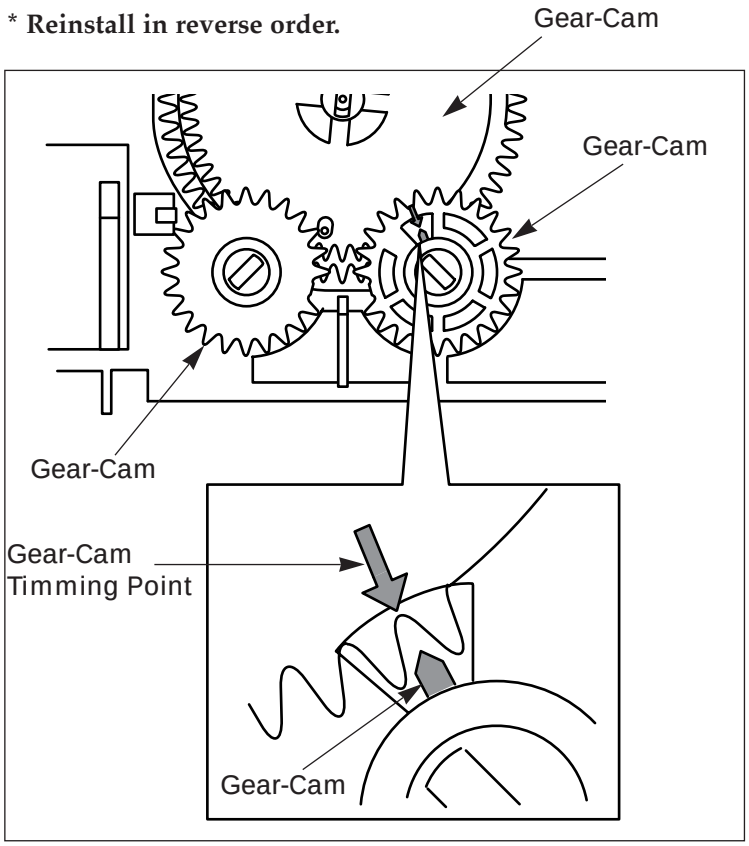
### 3-5-2 Main Disassembly

1. Remove the Table-Chuck Ass'y(⑯) from the Base-Main by turning it.
2. Push the Slider-Cam(①)towards right, then lift it up to remove.
3. Remove the Gear-Tray(⑥) from the Base-Main by releasing the fixed hook.
4. Remove the Gear-Converter(⑦)from the Base-Main by releasing the fixed hook.
5. Remove the Gear-Cam(⑤) from the Base-Main by releasing the fixed hook.
6. Remove the Belt(②) from the Pulley-Motor Ass'y(⑰) & the Gear-Pulley(③).
7. Remove the Gear-Pulley(③) from the Base-Main by releasing the fixed hook.
8. Remove the Gear-Load(④).
9. Remove the Gear-Synchro(⑧).
10. Desolder two soldering points of the CD SUB PCB, then remove it from Base-Main by releasing the hook.
11. Remove the Pulley-Motor Ass'y(⑰) by releasing the hook.
12. Remove the PCB-SW Ass'y(⑱) by releasing the hook.

### 3-5-3 CD Main PCB Disassembly

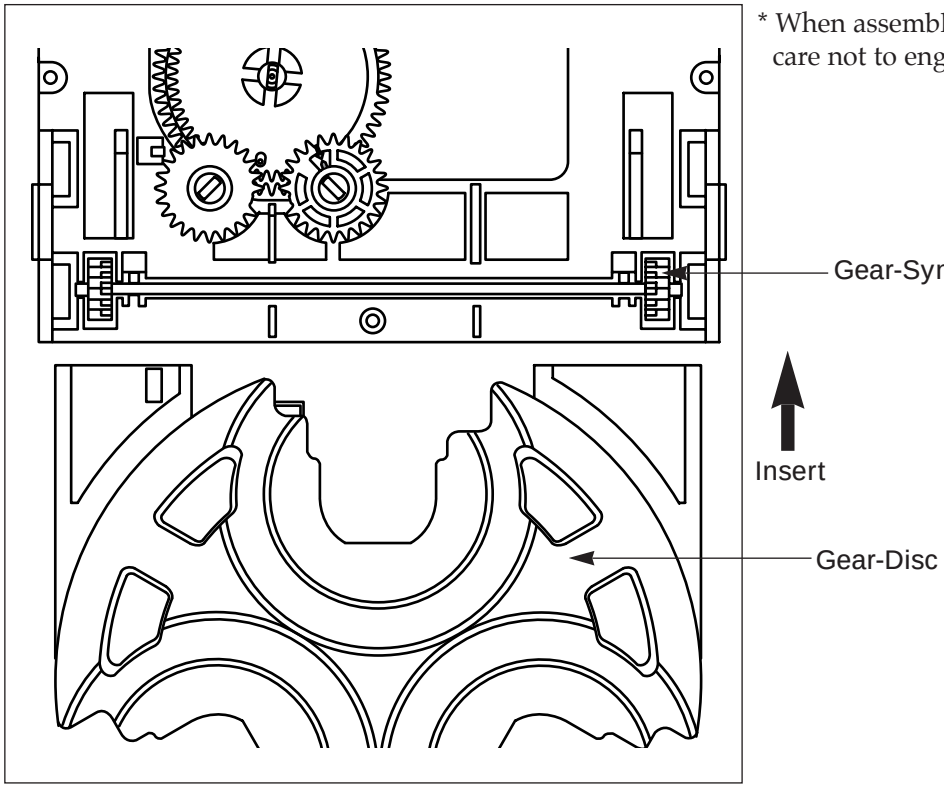
1. Remove the Lever-Lifter(⑲) from the Base-Main by releasing two hooks.
2. Remove four Rubber-CD(⑳) from the Lever-Lifter and then remove the Deck-CD(㉑).
3. Remove the Hook.
4. Remove the CD MAIN PCB with the soldering iron.

*** Reinstall in reverse order.**




* Align the Gear-Cam with the Gear-Tray as shown ing Figure 3-6, then mount the Tray-Disc.

Figure 3-6




* When assembling the Tray-Disc,take extreme care not to engage with Gear-Synchro.

Figure 3-7

## 3-6 CD Deck

1. Remove the Shaft ①.
2. Lift the P/U ②.
   Note : Take extreme care not to touch the surface of lens.
   If there is an alien materials, clean it with swab smeared alcohol.
3. Lift the Center-ring ③.
4. Remove the Spring-T/Table ④.
5. Remove the Turn-Table (M) ⑤.
6. Remove 2 screws ⑥ and then remove the Spindle-Motor ⑦.
7. Remove the Cover-Gear ⑧ by pushing the hook.
8. Remove the Gear (c) ⑨ by pushing the hook.
9. Lift the Gear(b) ⑩.
10. Remove the Gear(a) ⑪.
11. Remove 2 screws ⑫ and the then remove the Feed-Motor ⑬.
12. Remove the Chassis-Deck (M) ⑭.

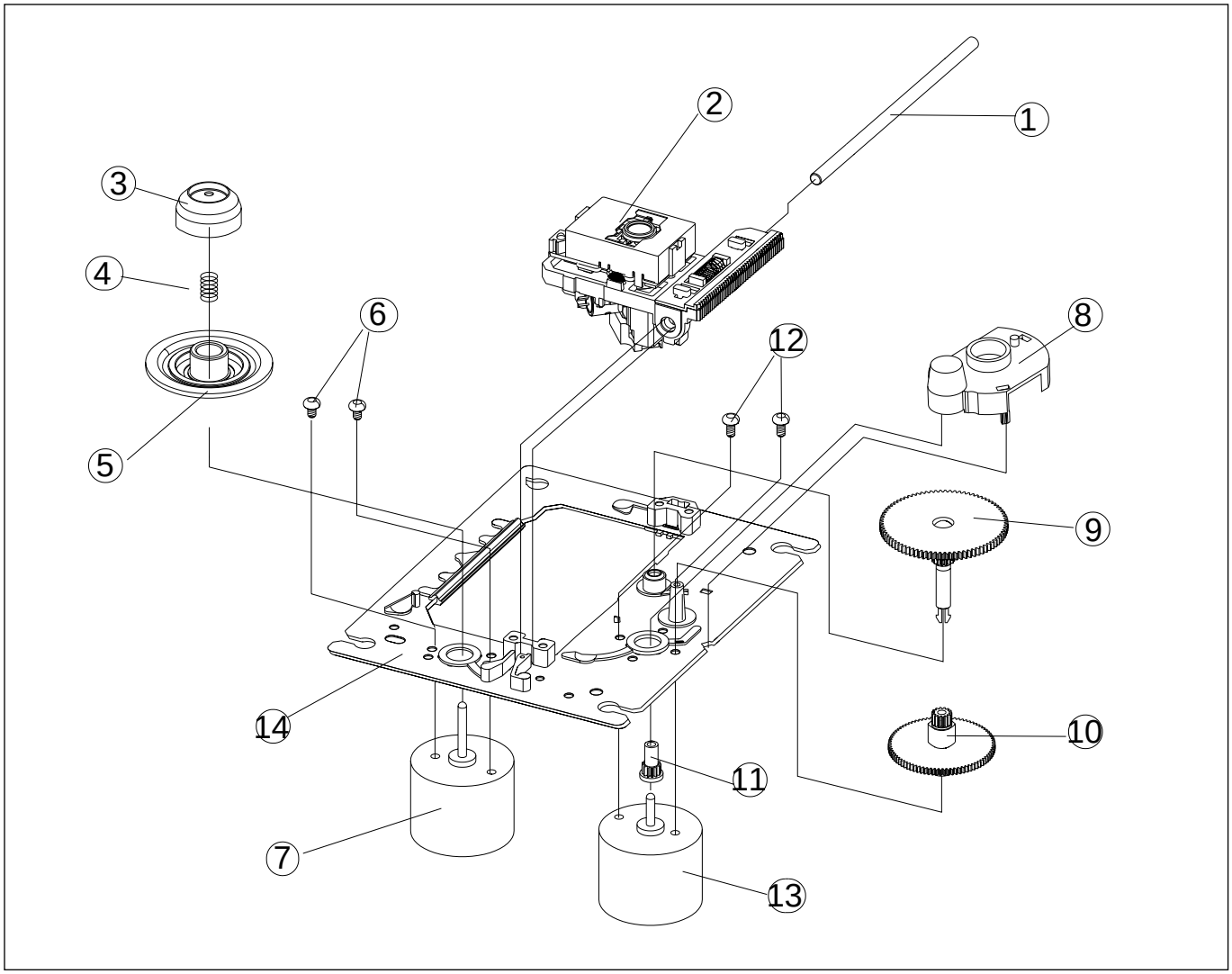



Figure 3-8

## 3-6 CD Deck (Option)

1. Remove the Shaft ①.
2. Lift the P/U ②.
   Note : Take extreme care not to touch the surface of lens.
   If there is an alien materials, clean it with swab smeared alcohol.
3. Lift the Center-Knob ③.
4. Remove the Center-ring ④.
5. Remove the Spring-T/Table ⑤.
6. Remove the Turn-Table(M) ⑥.
7. Remove 2 screws ⑦ and then remove the Spindle-Motor ⑧.
8. Remove the Cover-Gear ⑨ by pushing the hook.
9. Remove the Gear(c) ⑩ by pushing the hook.
10. Lift the Gear(b) ⑪.
11. Remove the Gear(a) ⑫.
12. Remove 2 screws ⑬ and then remove the Feed-Motor ⑭.
13. Remove the Chassis-Deck(M) ⑮.

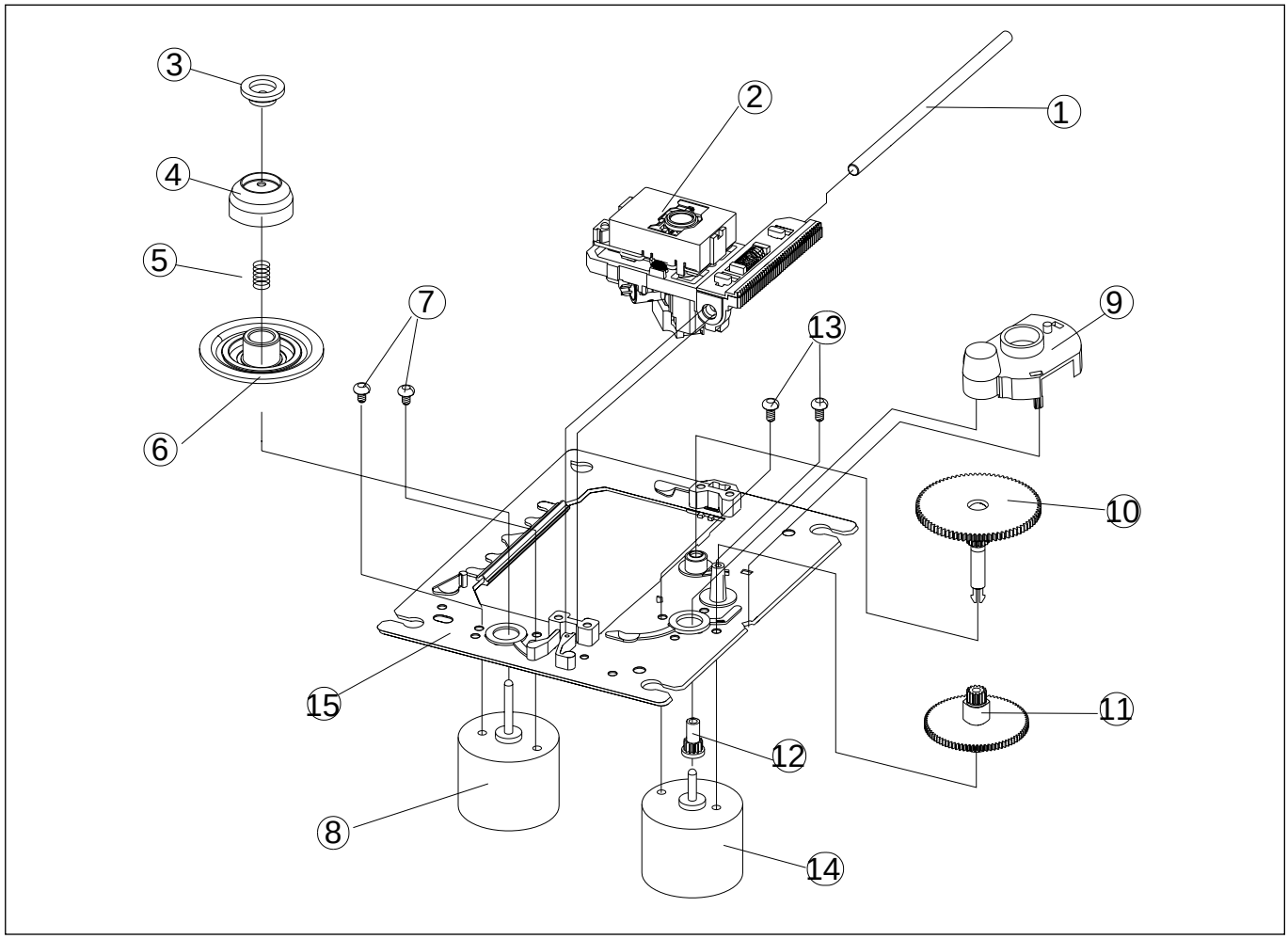
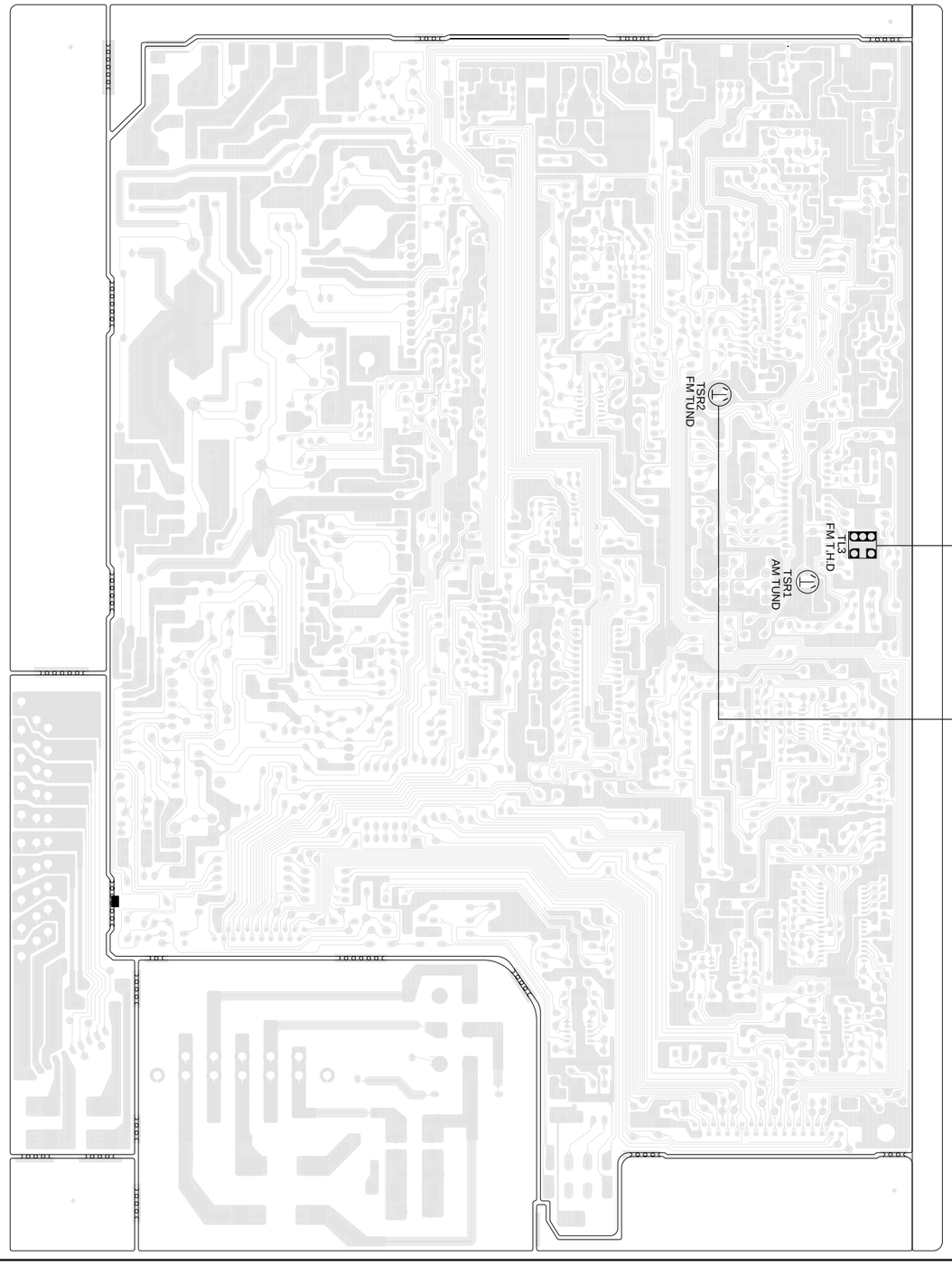



Figure 3-9

# 4. Alignment and Adjustments

## 4-1 Tuner




| FM THD Adjustment | |
|---|---|
| SSG FREQ. | 98 MHz |
| Adjustment point (TL3) | FM DETECTOR COIL |
| Output | 60 dB |
| Minumum Distortion (0.3% below) (Figure 4-1) | |

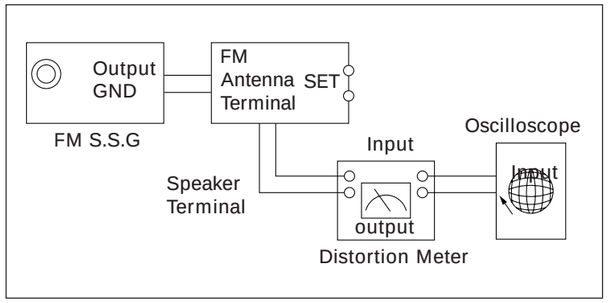



Figure4-1 IF CENTER and THD Adjustment

| FM Search Level Adjustment | |
|---|---|
| SSG FREQ. | 98 MHz |
| Adjustment point (TSR2) | BEACON SENSITIVITY SEMI-VR(5KΩ) |
| Output | 450kHz |
| Adjust IVR1 so that “TUNED” of FLT is lighted (Figure 4-2) | |

*Adjust FM S.S.G level to 23dB

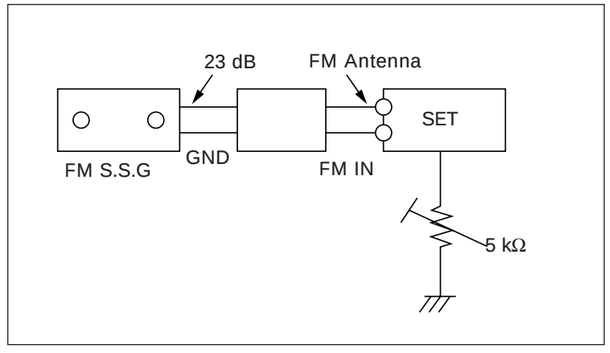



Figure4-2 FM Auto Search Level Adjustment

# 4-2 Cassette Deck

## 4-2-1 To Adjust Tape Speed

**Notes**

1) Measuring tape: i) MTT-111 (or equivalent)
(Tapes recorded with 3kHz)
ii) MTT-5512 (or equivalent)
2) Connect the cassette deck to the frequency counter as in figure 4-3.

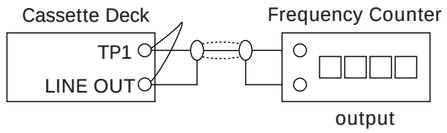



Figure 4-3

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | NOR SPEED Control | OUT (connected to the frequency counter) | 1) Deck 1:MTT-111<br>2) Press PLAY SW button<br>3) Deck 2:Same as above | Turn JSR5 to left and right | 3KHz | |
| 2 | HI SPEED Control | Same as above | 1) Deck 1:MTT-111<br>2) Deck 2:MTT-5512<br>3) Press Hi Speed dubbing SW button | Turn JSR6 to left and right | 6KHz | |

## 4-2-2 To Adjust PlayBack Level

**Notes**

1) Before the actual adjustment, clean the play/recording head.
2) Measuring tape :
i) MTT-114NA(or equivalent 12.5kHz AZIMUTH control)
ii) MTT-150(or equivalent : Dolby level 200nwb/m)
3) Dolby NR SW OFF
4) The cassette deck is connections as shown in figure 4-5.

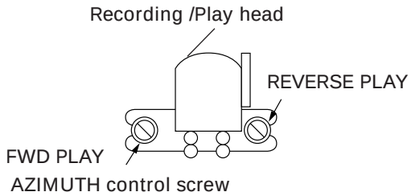



Figure 4-4

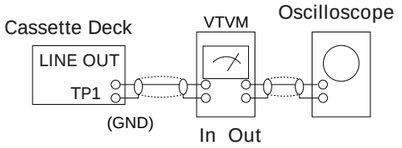



Figure 4-5

### ① Adjust Deck 1 Play Level

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | AZIMUTH | TP1 OUT (VTVM is connected to the scope) | After putting MTT-114NA into Deck 1<br>1) Press FWD PLAY button.<br>2) Press REV PLAY button. | 1) Turn the control screw to as shown in Figure4-4.<br>2) Adjust the right control screw to playback REV. Mode | Max output and same phase (both channels) | After adjustment secure it with REGION LOCK. |
| 2 | PlayBack out Level | Same as above | PLAY MTT-150 on Deck 1. | L-CH:Turn JSR1L to the right and left<br>R-CH:Turn J SR1R to the right and left | 150mV | See the diagram for adjustment locations. |

### ② Adjust Deck 2 Play Level

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | AZIMUTH | TP1 OUT (VTVM is connected to the scope) | After putting MTT-114NA into Deck 2<br>1)Press FWD PLAY button.<br>2)Press REV PLAY button. | 1) Turn the control screw to as shown in Figure4-4.<br>2)Adjust the right control screw to playback REV. Mode | Max output and same phase (both channels) | After adjustment secure it with REGION LOCK. |
| 2 | PlayBack out Level | Same as above | PLAY MTT-150 on Deck 2. | L-CH:Turn JSR2L to the right and left<br>R-CH:Turn JSR2R to the right and left | 150mV | See the diagram for adjustment locations. |

## 4-2-3 To Adjust Recording Level

NOTES

1) Connect the measuring instruments as shown in Figure 4-6.
2) Set the DOLBY NR Switch off.
3) Measuring tape:
   MTT-5512 (or equivalent: normal recording)
4) The input signals supply 400Hz 400mV into AUX IN of AMP (AUDIO OSC.)

| Step | Item | Pre-Setup Condition | Pre-Setup | To Adjust | Standard | Remark |
|---|---|---|---|---|---|---|
| 1 | Normal electric current for recording | Connect to TP2 as in Figure4-6 and read VTVM | Insert MTT-5512 into Deck2, then press REC button. | L-CH : JSR3L to the right and left.<br>R-CH : JSR3R to the right and left | 400 mV | See diagram for adjustment locations |
| 2 | BIAS Electric current | Connect to TP3 as in Figure 4-6 and read the VTVM | Insert MTT-5512 into Deck2, then press REC button. | L-CH: JSR4L and R-CH: JSR4R to the right and left | 6 mV | See diagram for adjustment locations |

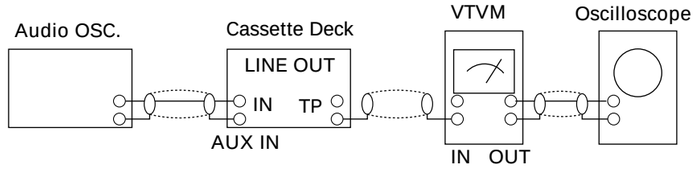
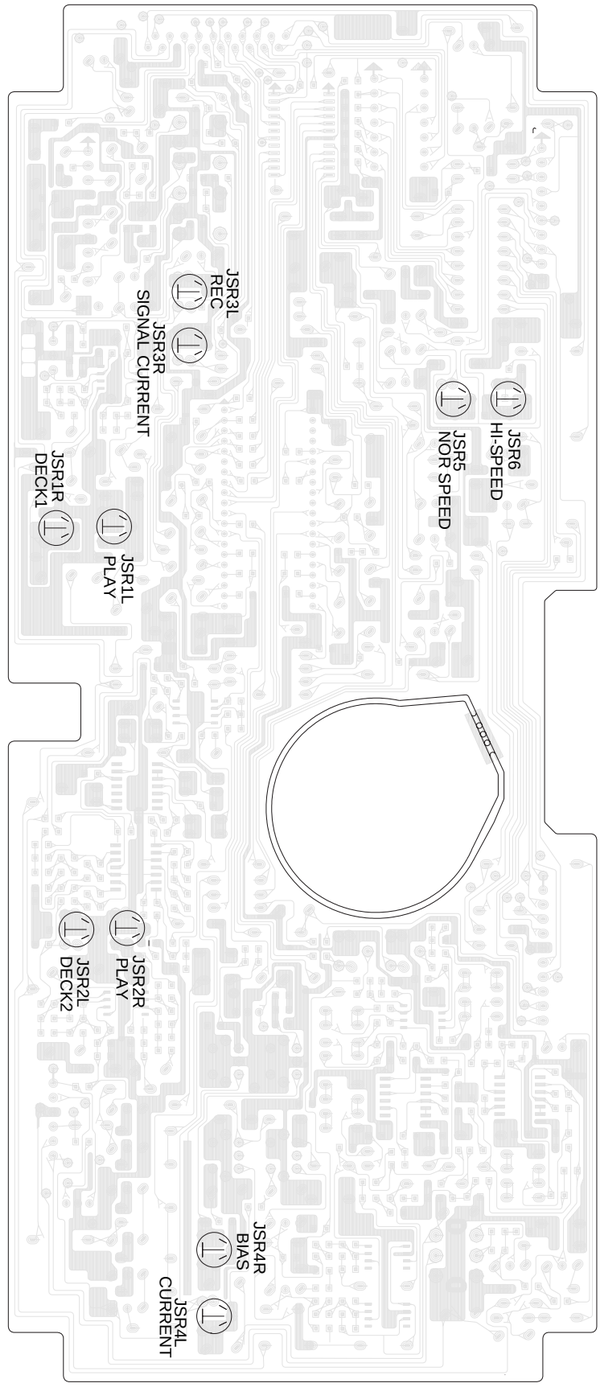



Figure 4-6

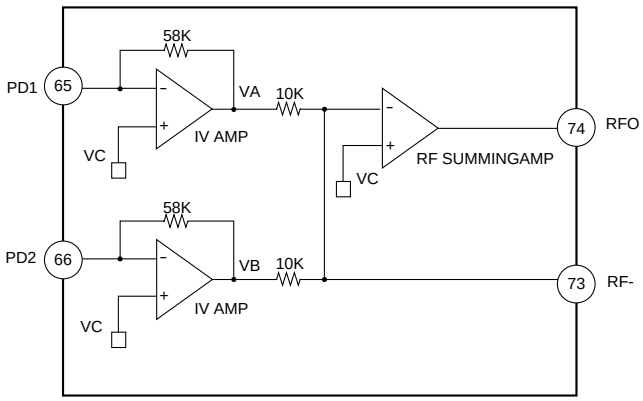


# 5. Special Circuit Descriptions

## 5-1 RF Amp Block

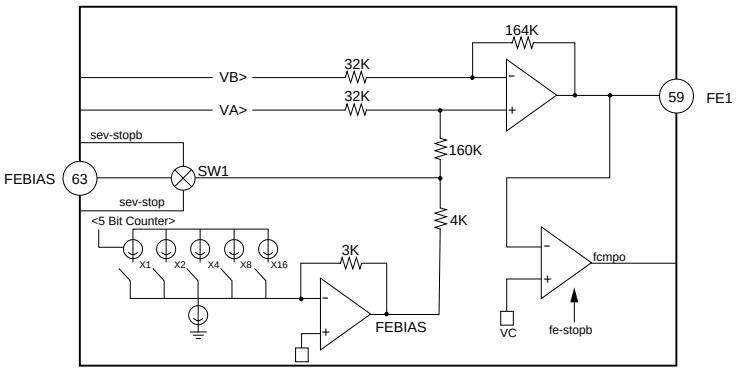
### 5-1-1 RF Amplifier

The two currents from input pins PD1 (A+C) and PD2 (B+D) are converted into voltages through I/V Amp, and they are added to RF summing Amp. The photo diode (A+B+C+D) signal which is I-V changed is outputted by RFO (pin74). At this pin, the eye pattern can be checked.



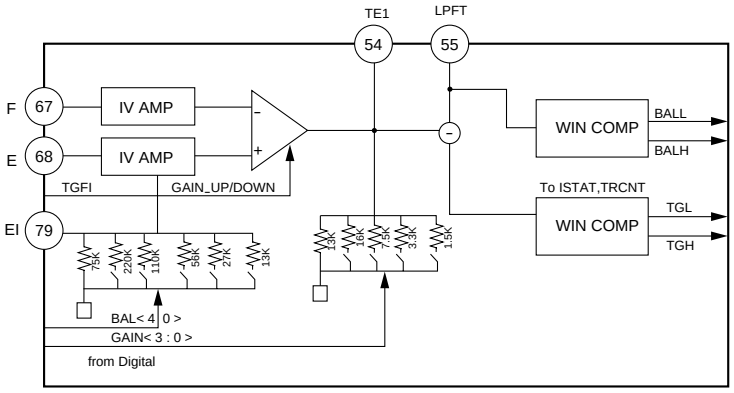

### 5-1-2 Focus Error Amp

The output of the focus error amp is the difference between RF I-V AMP(1) output Va and RF I-V AMP(2) output Vb,just is the Photo Diode ((A+C) - (B+D)) signal which is I-V changed.
The focus error bias voltage applied to the (+) of focus error amp can be changed by D/A converter as shown in diagram, so that the offset of focus error amp can be adjust automatical.
Focus error bias can be adjusted from the range of +100mV ~ -100mV by connectiong the resistor with pin 63 (FEBIAS).



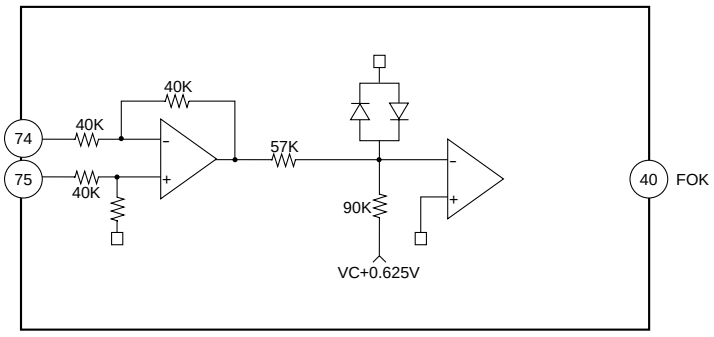
## 5-1-3 Tracking Error Amp

The current signals from the side spot photo diode (E and F) are input to the E and F pin and converted into voltage signals by E I-V and F I-V AMP. The output of tracking error amp is due to the difference between E I-V AMP voltage output.
The E-F balance can be adjusted by modifying the gain of E I-V AMP, and the tracking gain(Pin TE1) can be adjusted automatically by micom program.



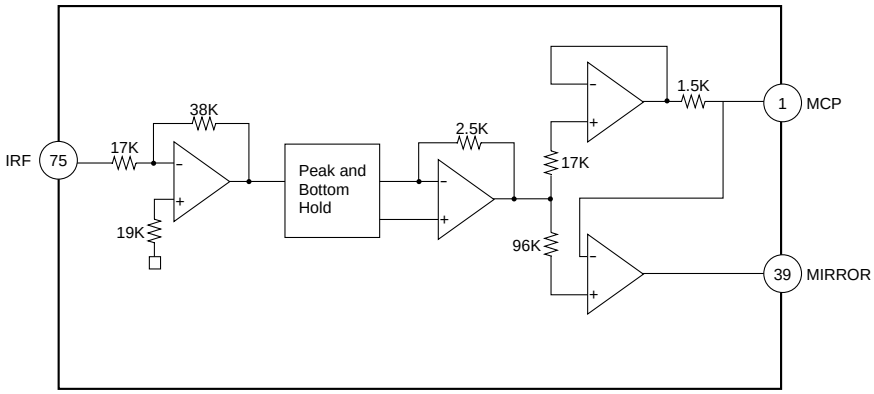

## 5-1-4 Focus OK Circuit

Extracting the DC part of RFI and RFO and comparing with the basic DC level, if RF Level is more than basic level, the FOK is output. The focus OK circuit generates a timing window of focus on to monitor the focus search status of focus serve.



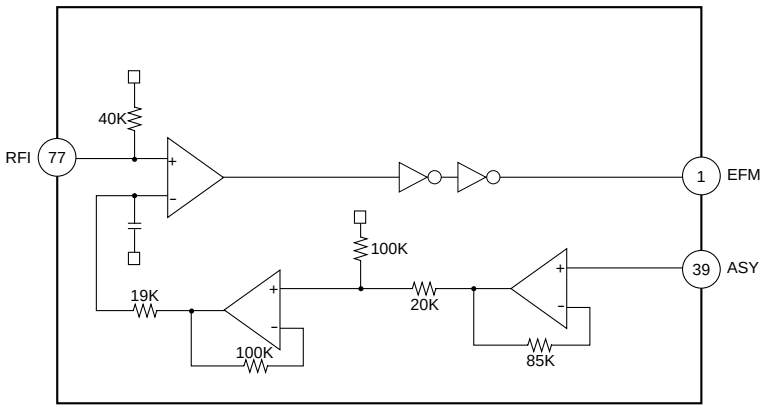
## 5-1-5 Mirror Circuit

After RFI signal is amplified by mirror amp, mirror signal is held in peak and bottom circuit. The following of 100KHZ traverse is possible in peak hold circuit and the loss of track count due to defect is counted in bottom hold circuit. Mirror output beyond 2KHz is. “L” at track on disc, “H” at interval between track on disc, “H” when the defect beyond 1.4ms is detected.
The time constant for the mirror hold must be sufficiently large  than of the traverse signal



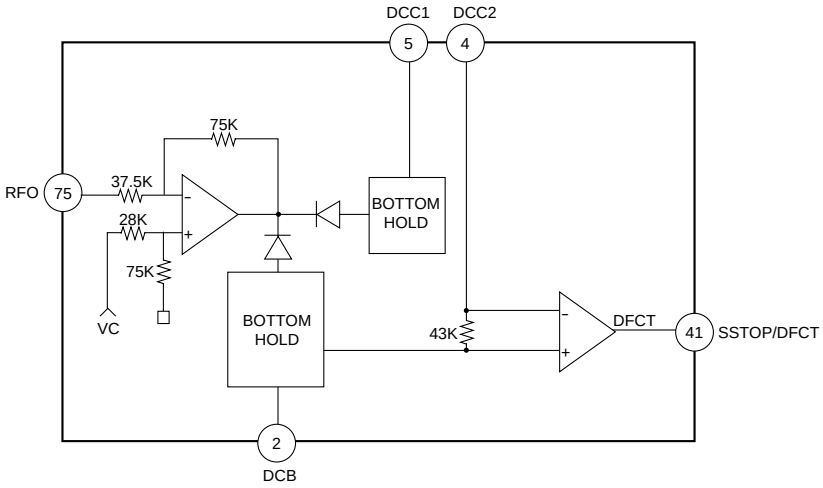

## 5-1-6 EFM Comparator

The EFM comparator converts a RF signal into a binary signal
As the asymmertry due to variations in disc manufacturing can not be eilminated by thr AC coupling alone, the reference voltage of EFM comparator is controlled utilizing the fact that the generation probability of 1,0 50% each in the binary EFM signals.



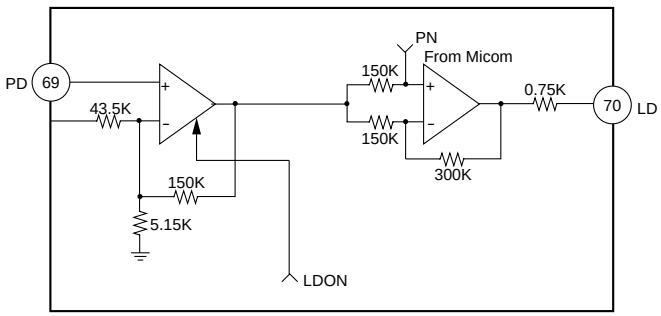
## 5-1-7 Defect Circuit

The RFO signal bottom, after being inverted, is held with two time constant of long and short. The short time-constant bottom hold is done for a disc mirror defect more than 0.1msec, the long time-constant bottom hold is done with the mirror level prior to the defect. By differentiating this with a capacitor coupling and shifting the level, both signals are compared to generate the mirror defect detection signal.



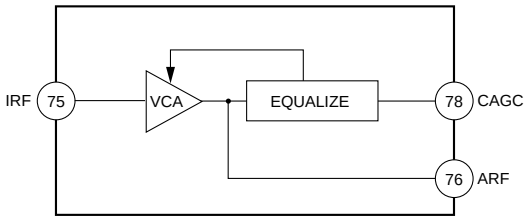

## 5-1-8 APC Circuit

As the laser diode has large negative temperature characteristic in its optical output when driven with a constant current on laser diode. Therefore, the output on processing monitor photo diode, must be a controlled current for getting regularly output power, thus the APC (Auto Power Control) circuit is composed.



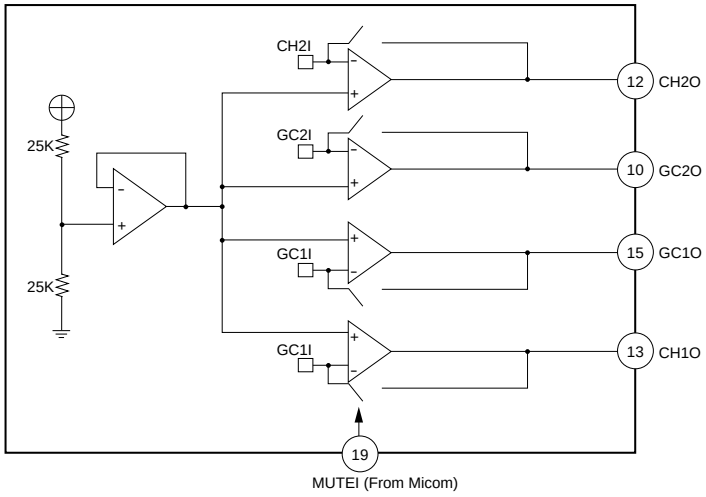
## 5-1-9 AGC Stability Circuit

The gain is adjusted by AGC Block with the function of maintainning the definite RF peak to peak level, after the operation of RF envelop detection and comparing with reference voltage.
RFO level is kept stable in 1Vp-p, and input to EFM Slice.



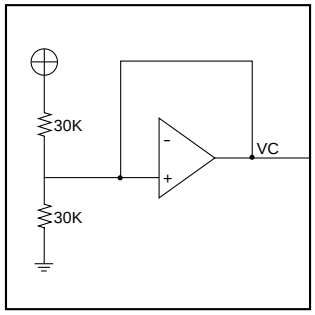

## 5-1-10 Post Filter

The adjustment of audio output gain and the integration of possible de-emphasis output are executed by the low pass filter. If the control by MUTE signal from micom exist, and when input signal absent, two channel of right and left is builted in.




## 5-1-11 Center Voltage Generation Circuit

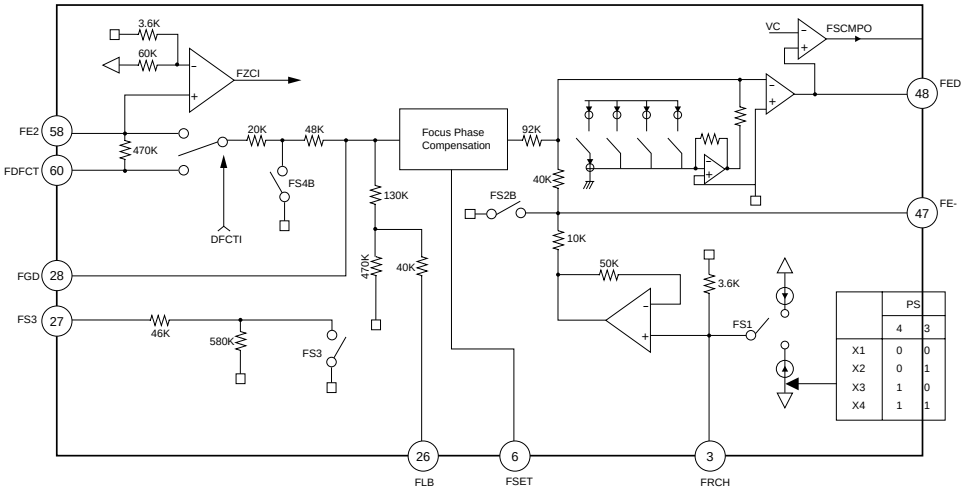
The Center Voltage is generated by using resistor dividing voltage.



# 5-2 Servo Block

## 5-2-1 Focus Servo Block

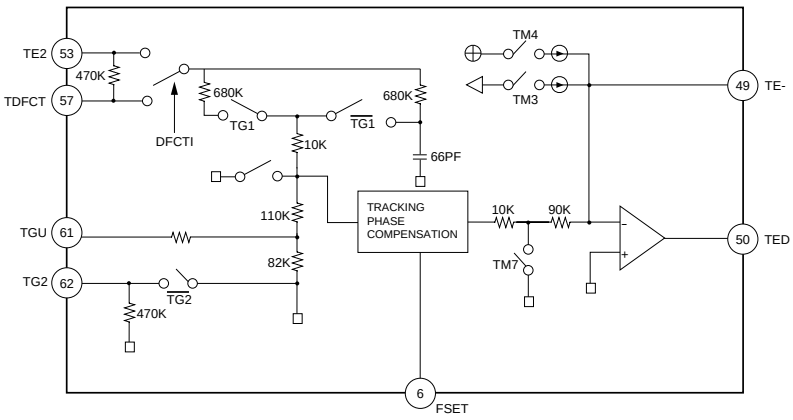
When defect="H (the defect signal is detected), the focus servo loop is muting in case of focus phase compensation. At this time, the focus error signal is outputted through the low pass filter formed by connecting a capacitor(0.1$\mu$F) and a built-in 470KΩ resistor to the FDFCT pin (pin60). Accordingly, the focus error output is held as the error value just before defect error during defect occuring. The peak frequency of focus loop phase compensation is at about 1.2KHz when the resistor connected to FSET pin(pin6) is 510kΩ, and it is inversely proportional to the resistor connected to the FSET pin. While the focus search is operating, the FS4 switch is on and then focus error signal is isolated, accordingly the focus search signal is output by FEO pin(pin48). When the FS2 switch is on(focus on), the focus servo loop is on and the focus error signal from FE2 pin(pin58) is outputted through the focus servo loop.




## 5-2-2 Tracking Servo Block

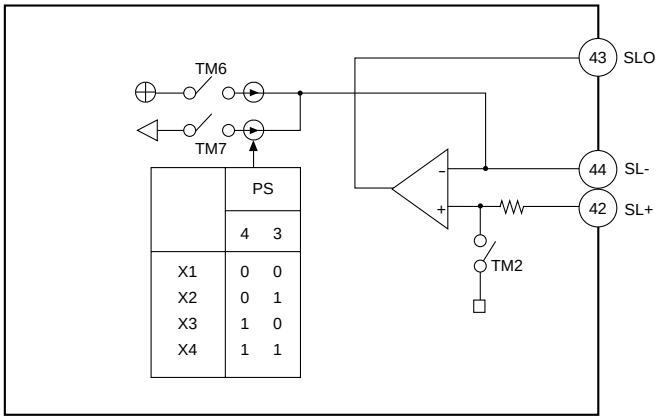
During detection of defect, the tracking error signal is output through the tracking servo loop after through the low pass filter formed by connecting a capacitor(0.1$\mu$F) and a built-in 470KΩ resistor to the TDFCT pin(pin57) in case of tracking phase compensation. The value of tracking gain up/down can be controlled by TGU and TG2 pin. The peak frequency of tracking loop phase compensation, the dynamic range and offset of op amp can be adjusted by changing the value of resistor connected to FSET pin same as focus loop. In case of unstable status of actuator after jumping, the ON/OFF of tracking loop is controlled by TM7 switch of break circuit.

After 10-track jumping, servo circuit gets out of the liner range and actuator,s tracking is unstable occasionally. Accordingly, unnecessary jumping with many tracking error should be prevented.



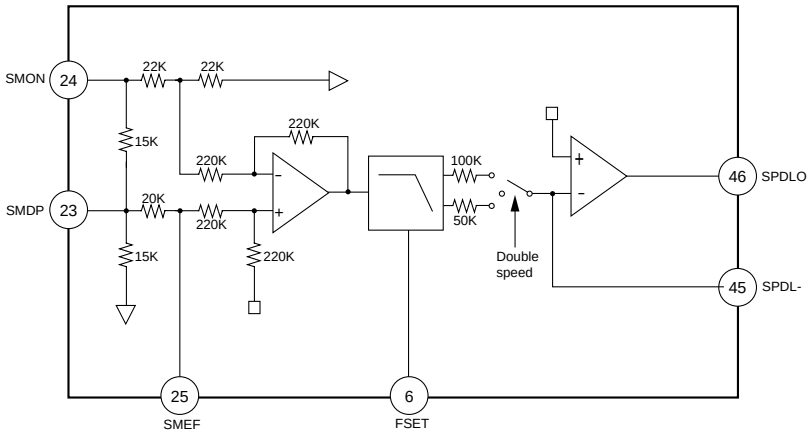
## 5-2-3 Sled Servo Block

The moving of pick-up is controlled by tracking servo output through low pass filter.
The sled kick voltage is output for track jump operation.




## 5-2-4 Spindle Servo Block

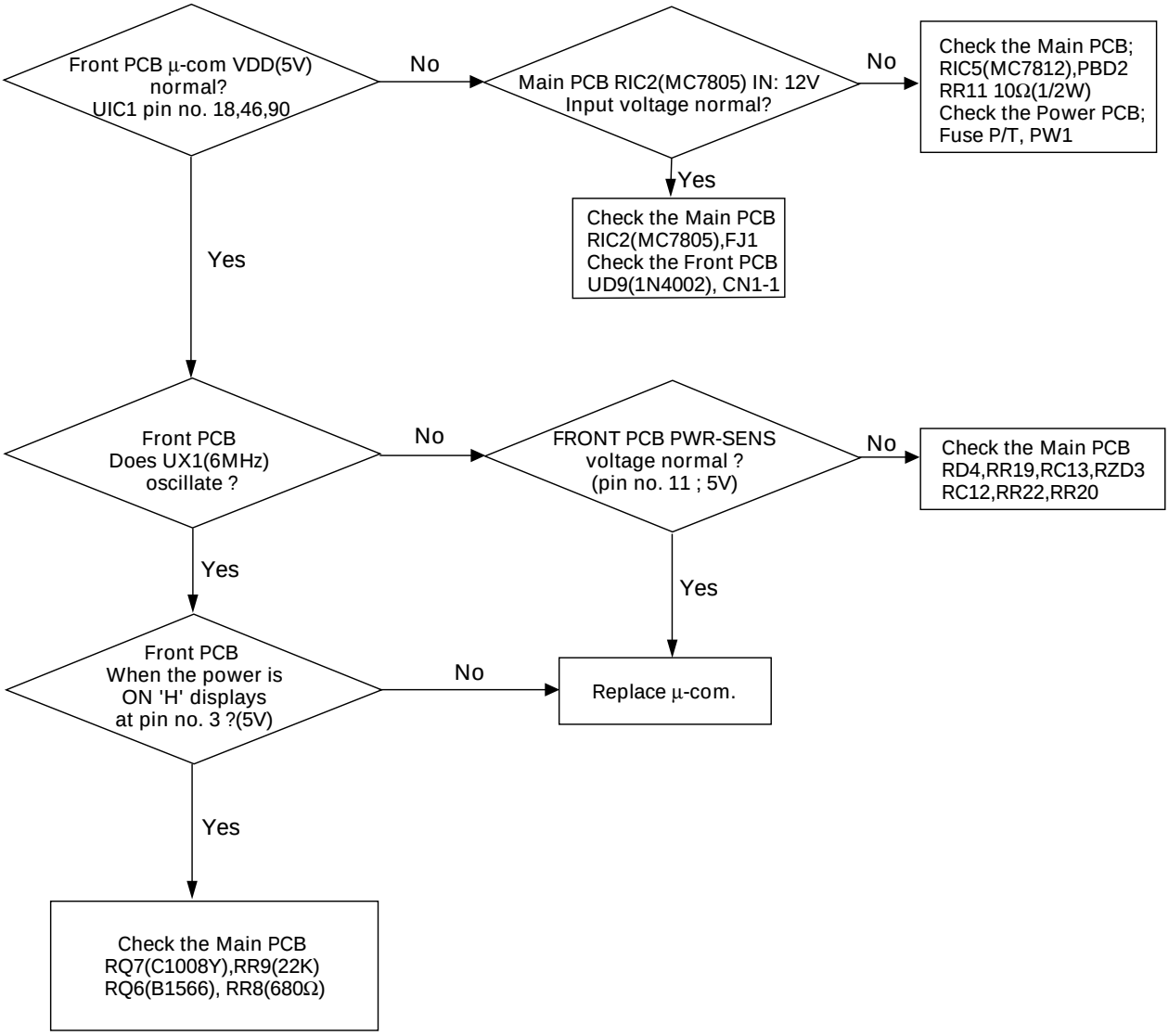
The 20KΩ resistor and 0.33μF capacitor form the 200Hz low pass filter, and the carrier component of spindle servo error signals is eliminated. In CLV-S mode, SMEF becomes "L" and pin 25 low pass filter fc lowers, strenthening the filter further. The characteristics of high frequency phase compensation in focus tracking servo and the characteristics of cut off frequecny in CLV low pass filter are test by FSET pin.



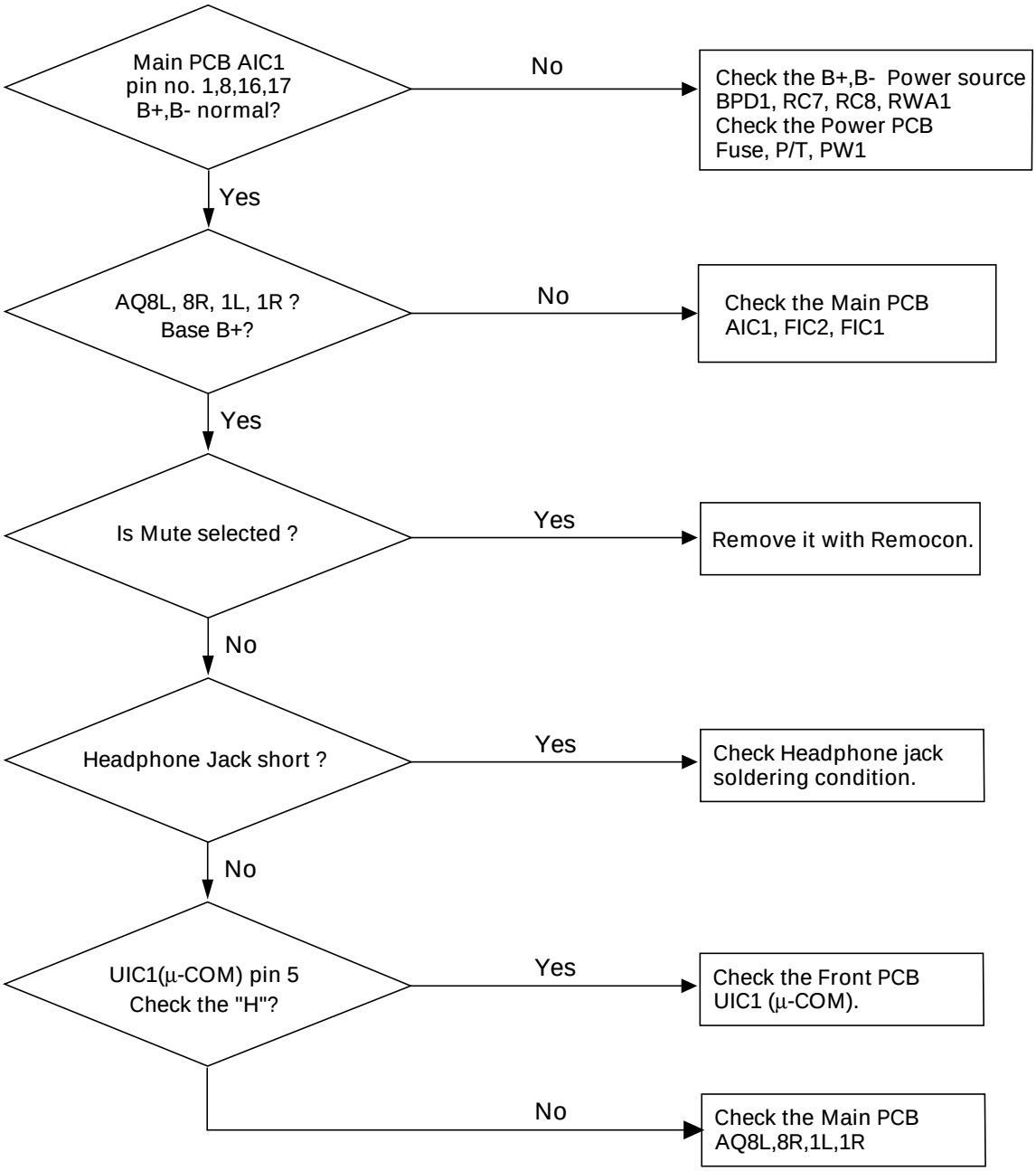
# 6. Troubleshooting

## 6-1 Amplifier

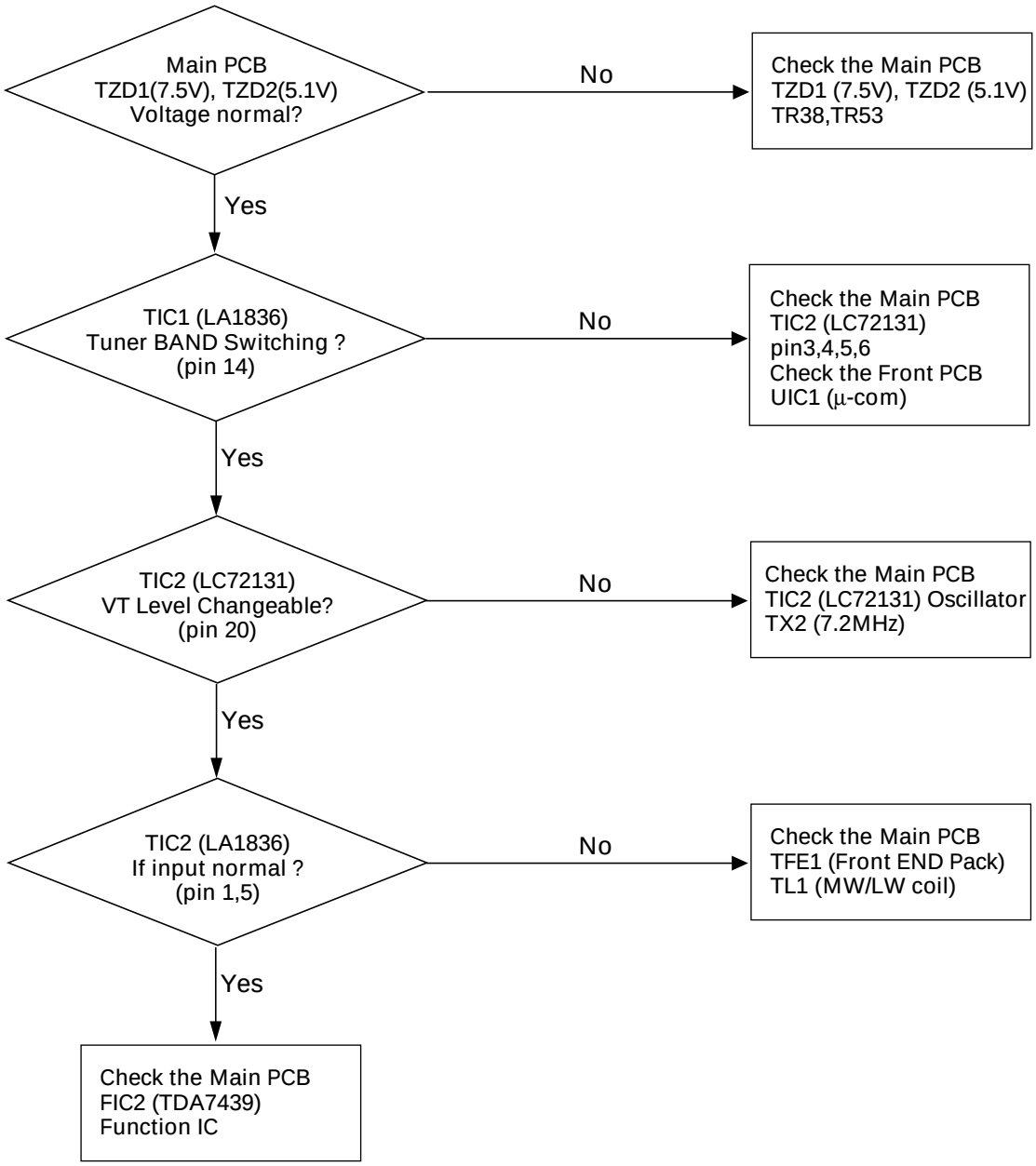
### 6-1-1 Power Malfunction


Front PCB μ-com VDD(5V) normal? UIC1 pin no. 18,46,90
No
Main PCB RIC2(MC7805) IN: 12V Input voltage normal?
No
Check the Main PCB; RIC5(MC7812),PBD2 RR11 10Ω(1/2W) Check the Power PCB; Fuse P/T, PW1
Yes
Check the Main PCB RIC2(MC7805),FJ1 Check the Front PCB UD9(1N4002), CN1-1
Yes
Front PCB Does UX1(6MHz) oscillate ?
No
FRONT PCB PWR-SENS voltage normal ? (pin no. 11 ; 5V)
No
Check the Main PCB RD4,RR19,RC13,RZD3 RC12,RR22,RR20
Yes
Yes
Front PCB When the power is ON 'H' displays at pin no. 3 ?(5V)
No
Replace μ-com.
Yes
Check the Main PCB RQ7(C1008Y),RR9(22K) RQ6(B1566), RR8(680Ω)

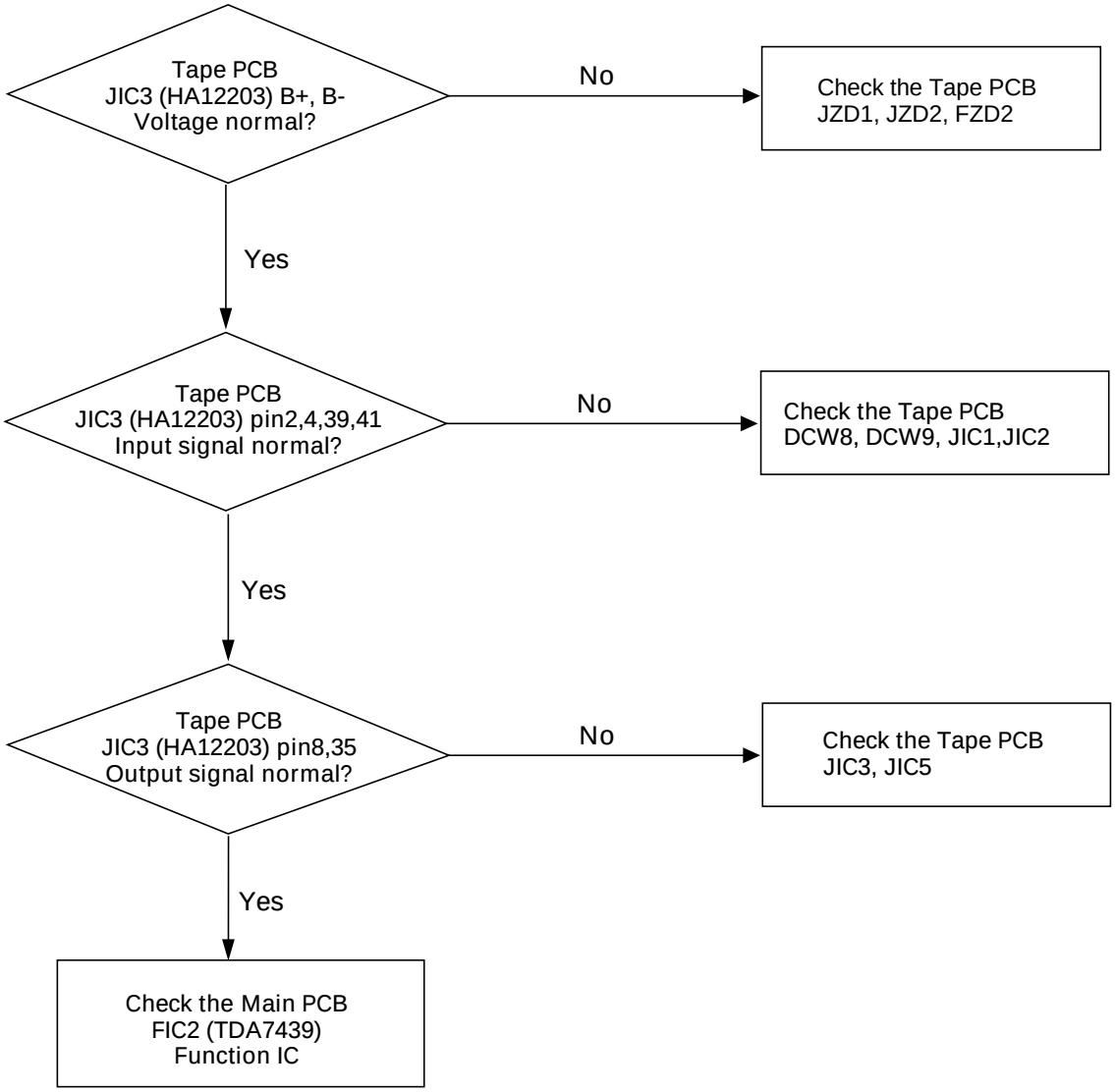
## 6-1-2 No Output



## 6-1-3 Tuner Malfunction(FM/AM)

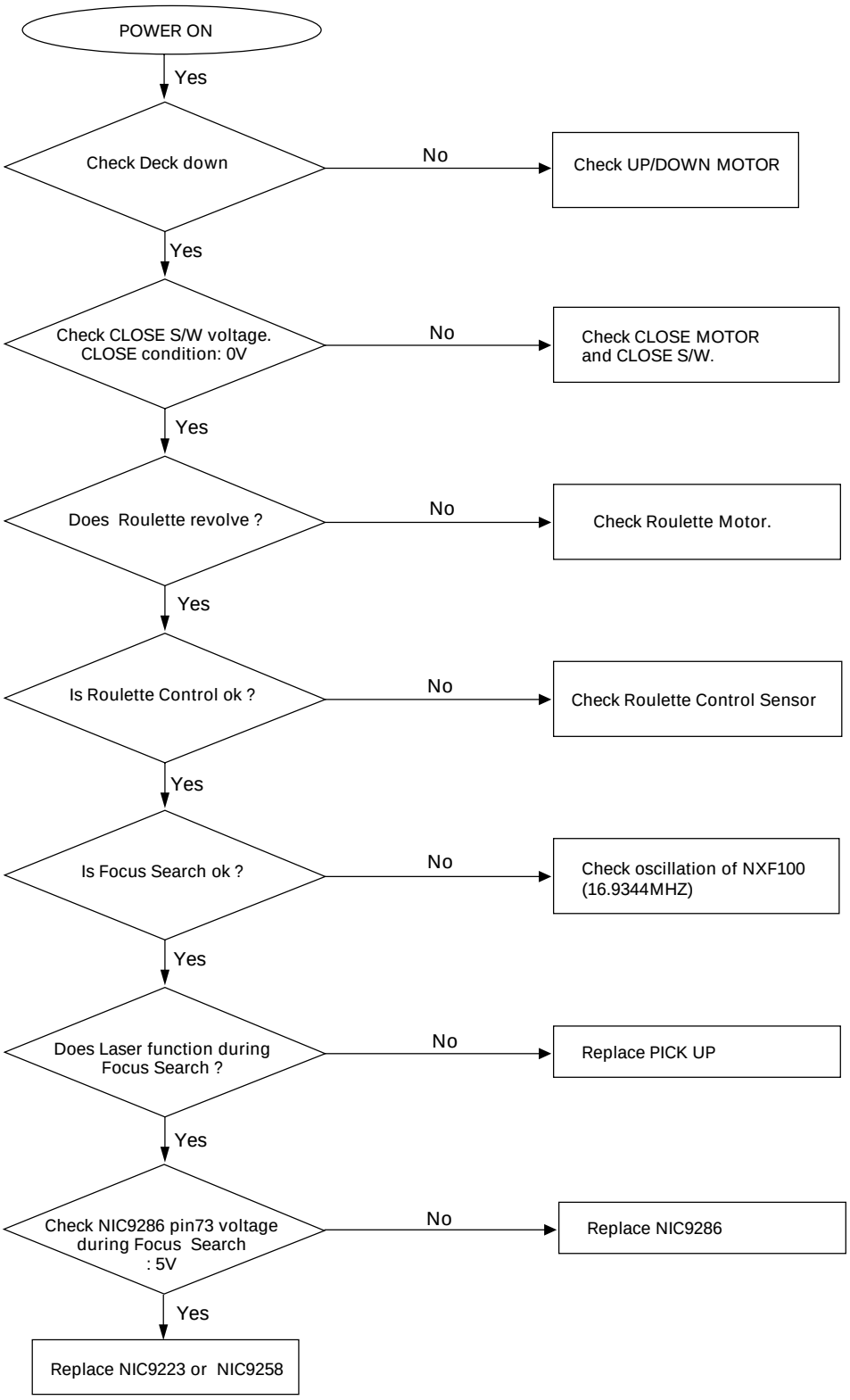


## 6-1-4 Tape

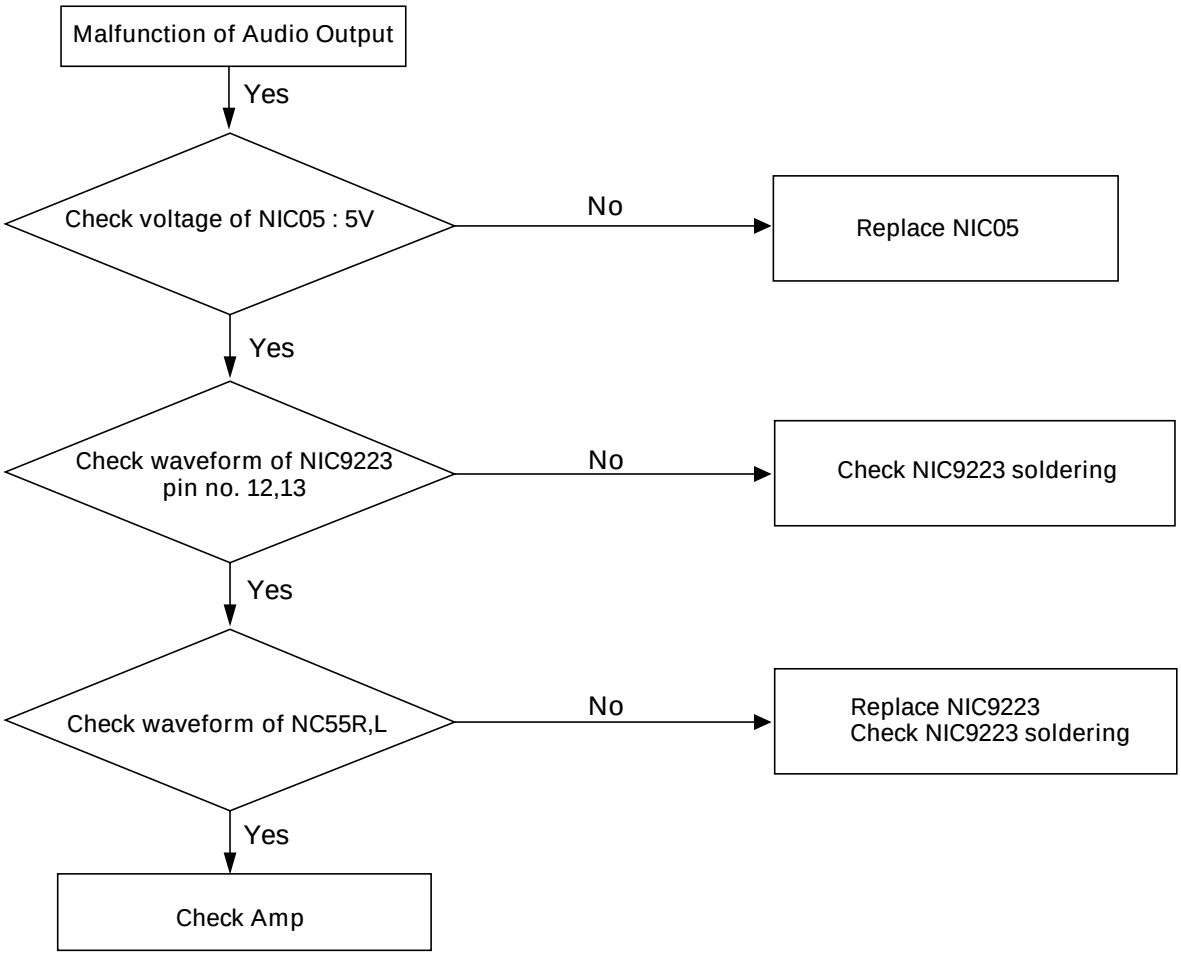

Tape PCB
JIC3 (HA12203) B+, B-
Voltage normal?
No
Check the Tape PCB
JZD1, JZD2, FZD2
Yes
Tape PCB
JIC3 (HA12203) pin2,4,39,41
Input signal normal?
No
Check the Tape PCB
DCW8, DCW9, JIC1,JIC2
Yes
Tape PCB
JIC3 (HA12203) pin8,35
Output signal normal?
No
Check the Tape PCB
JIC3, JIC5
Yes
Check the Main PCB
FIC2 (TDA7439)
Function IC

# 6-3 CD

## 6-3-1 Revolution Malfunction

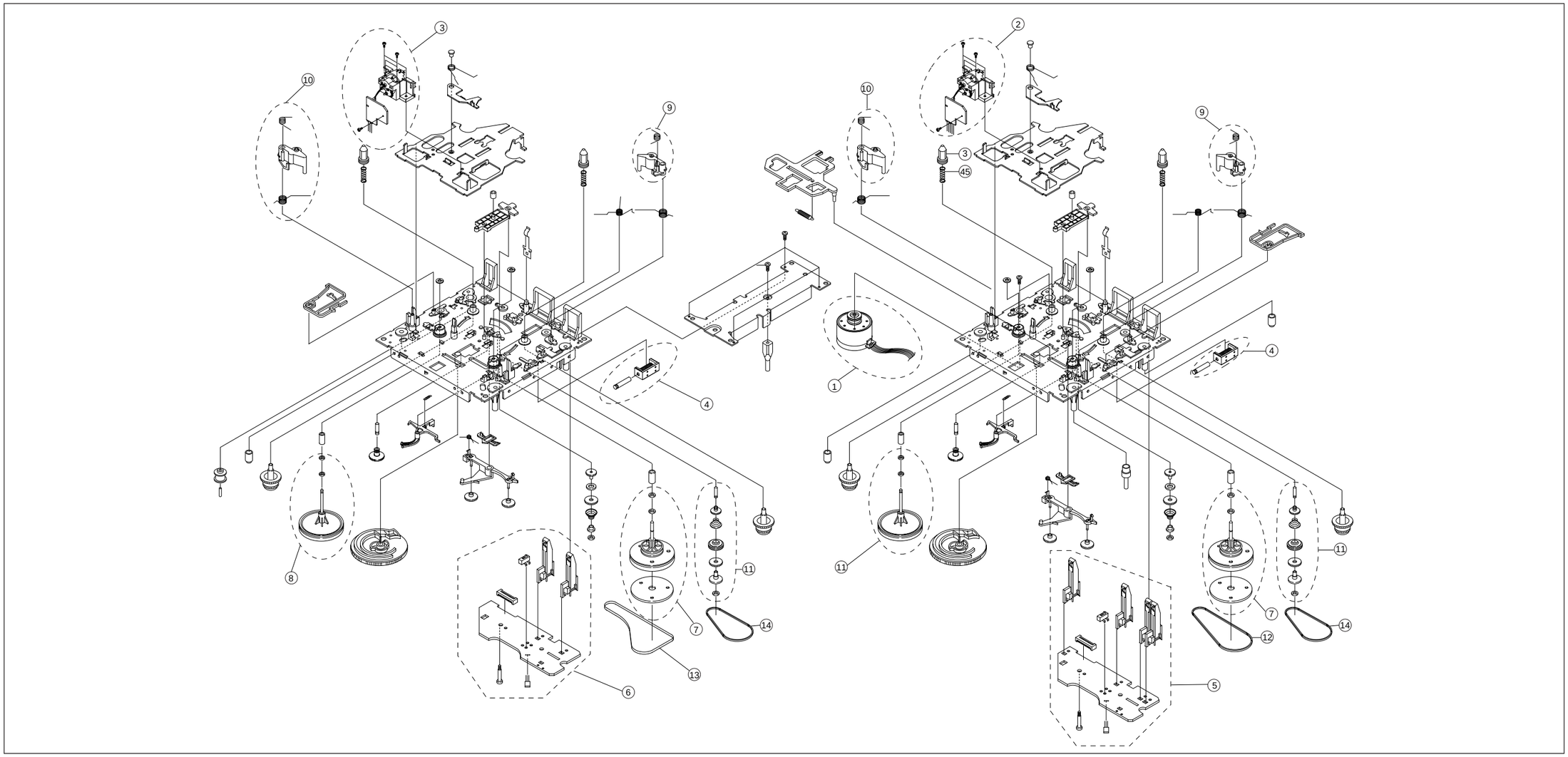


## 6-2-2 Audio Output Malfunction



# 7.Exploded Views and Parts List

## 7-1 Cassette Deck Exploded View and Parts List

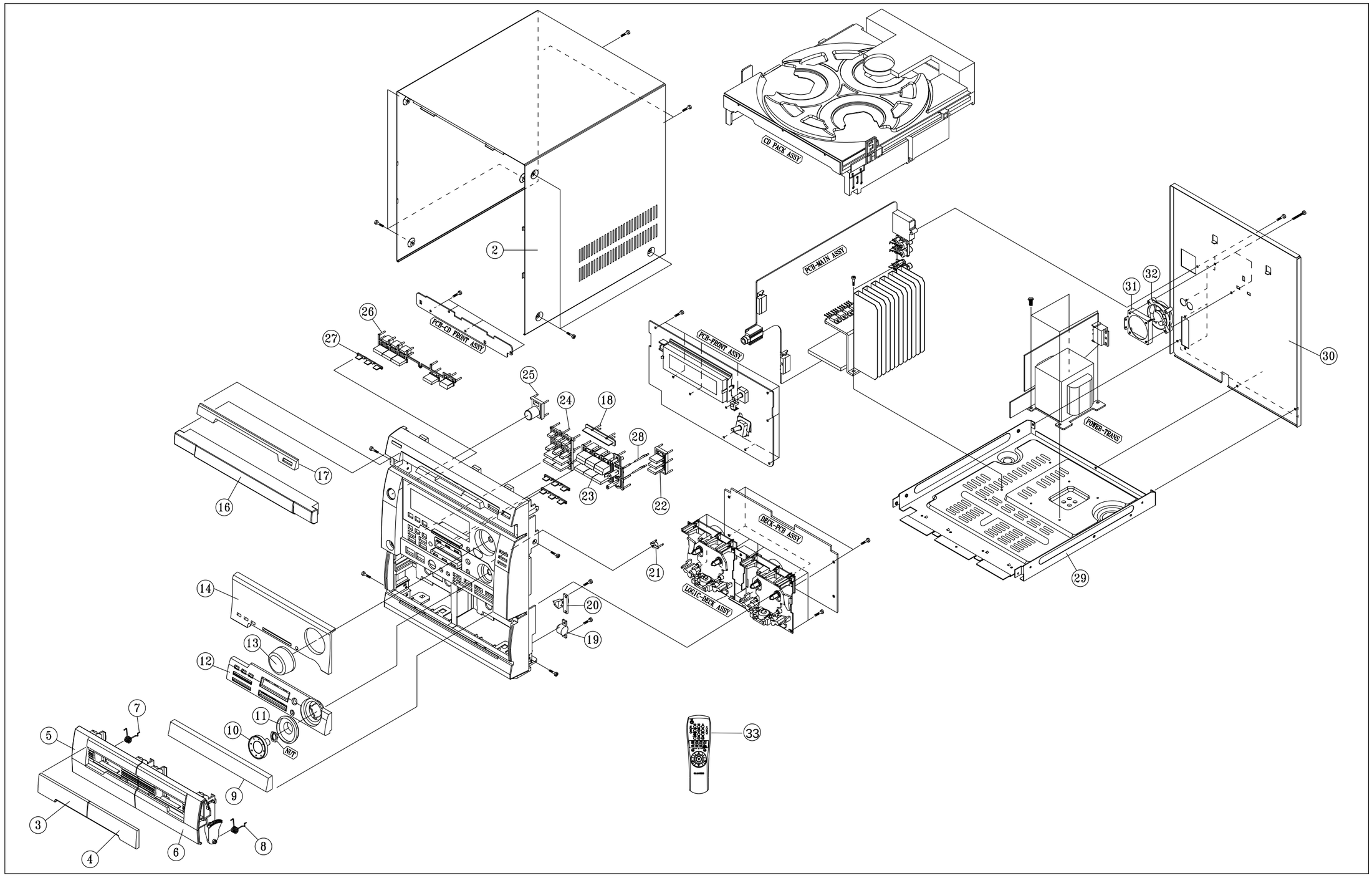



| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| | AH59-20004U | DECK-CASSETTE | ADR2118TW | |
| 1 | AH81-11052G | MOTOR ASS'Y | EG530YD2BH | |
| 2 | AH81-11052D | HEAD ASS'Y (R/P) | YK56RAA4N3 | |
| 3 | AH81-10798D | HEAD ASS'Y (P/B) | YK50PBB4N3 | |
| 4 | AH81-10798E | SOLENOID ASS'Y | ADR2100-01 | |
| 5 | AH81-11052E | CNTR ASS'Y (R/P) | ADR2118TW-03 | |
| 6 | AH81-11052B | CNTR ASS'Y (P/B) | ADR2118TW-04 | |
| 7 | AH81-10798H | FLYWHEEL ASS'Y (F) | ADR2100-04 | |

| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| 8 | AH81-10798J | FLYWHEEL ASS'Y (R) | ADR2100-05 | |
| 9 | AH81-10798K | PINCH ARM (F) | ADR2100-06 | |
| 10 | AH81-10798M | PINCH ARM (R) | ADR2100-07 | |
| 11 | AH81-10798N | CLUTCH ASS'Y | ADR2100-08 | |
| 12 | AH81-11052A | MAIN BELT (R/P) | ADR2118TW-01 | |
| 13 | AH81-11052E | MAIN BELT (P/B) | ADR2118TW-02 | |
| 14 | AH81-10798U | SUB BELT | ADR2100-09 | |

# 7-2 Main Exploded View and Parts List

## 7-2-1 Exploded View



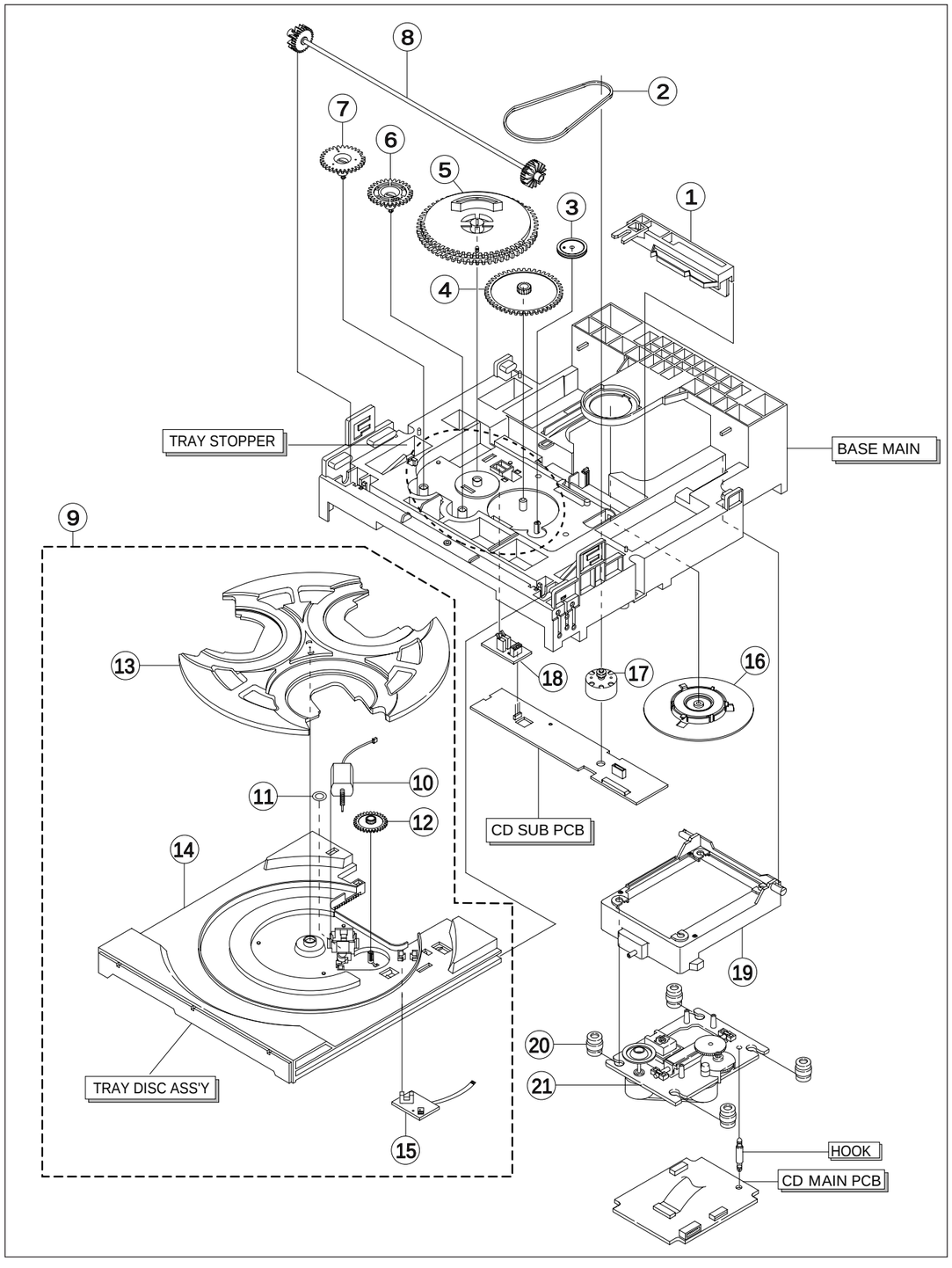
## 7-2-2 Parts List (using MAX-870)

| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| 2 | AH64-30390A | CABINET-TOP | PCM 0.625T (D/GRAY) | |
| 3 | AH64-40431A | WINDOW-DOOR,A | PMMA VIOLET(LUCKY, 71129) | |
| 4 | AH64-40432A | WINDOW-DOOR,B | PMMA VIOLET(LUCKY, 71129) | |
| 5 | AH64-50335C | DOOR-CASS,A | ABS 94HB BLK | |
| 6 | AH64-50337C | DOOR-CASS,B | ABS 94HB BLK | |
| 7 | AH61-62004A | SPRING-EJECT,A | STS Ø1.1 | |
| 8 | AH61-62005A | SPRING-EJECT,B | STS Ø1.1 | |
| 9 | AH61-20480B | CAP-FRONT,E | MIPS 94HB BLK | |
| 10 | AH64-11222C | KNOB-JOG | ABS D/GRAY (HF-06660I,G3174) | |
| 11 | AH64-42002B | DECO-JOG | ABS NATURAL HF-0660I,G3174 | |
| 12 | AH64-42001C | DECO-FRONT | MIPS 94HB BLK | |
| 13 | AH64-11221C | KNOB-VOLUME | ABS D/GRAY (HF-0660I,G3174) | |
| 14 | AH64-40430C | WINDOW-VFD | PMMA VIOLET(LUCKY,41802) | |
| 16 | AH64-50336D | DOOR-CD | ABS 94HB BLK(LUCKY,41802) | |
| 17 | AH64-40429B | WINDOW-CD | PMMA VIOLET | |
| 18 | AH67-10162A | LENS-COM | ACRYL | |
| 19 | AH61-80030A | DAMPER-ASSY | HF-0660I, G3174 | |
| 20 | AH95-50001A | LATCH-ASSY | MAX-555 | |
| 21 | AH67-10164A | LENS-JOG | ACRYL | |
| 22 | AH64-11217B | KNOB-SRS | ABS D/GRAY (HF-0660I, G3174) | |
| 23 | AH64-11218D | KNOB-FUNCTION | ABS D/GRAY (HF-0660I, G3174) | |
| 24 | AH64-11219B | KNOB-DECK | ABS D/GRAY (HF-0660I, G3174) | |
| 25 | AH64-11223C | KNOB-POWER | ABS D/GRAY (HF-0660I, G3174) | |
| 26 | AH64-11216C | KNOB-CD OPEN | ABS D/GRAY (HF-0660I, G3174) | |
| 27 | AH67-10163A | LENS-CD | ACRYL | |
| 28 | AH67-10165A | LENS-ECHO | ACRYL | |
| 29 | AH64-30416A | CABINET-BOTTOM | SECC 1.0T | |
| 30 | AH64-30417D | CABINET-REAR | SECC 0.8T | |
| | AH64-30417E | | | |
| | AH64-30417F | | | |
| | AH64-30417J | | | |
| 31 | AH61-10747A | BRACKT-FAN | BRACKT-FAN | |
| 32 | AH31-10020A | FAN-DC | FAN-DC | |
| 33 | AH59-10120A | REMOCON-ASSY | REMOCON-ASSY | |

## 7-2-2 Parts List (using MAX-880)

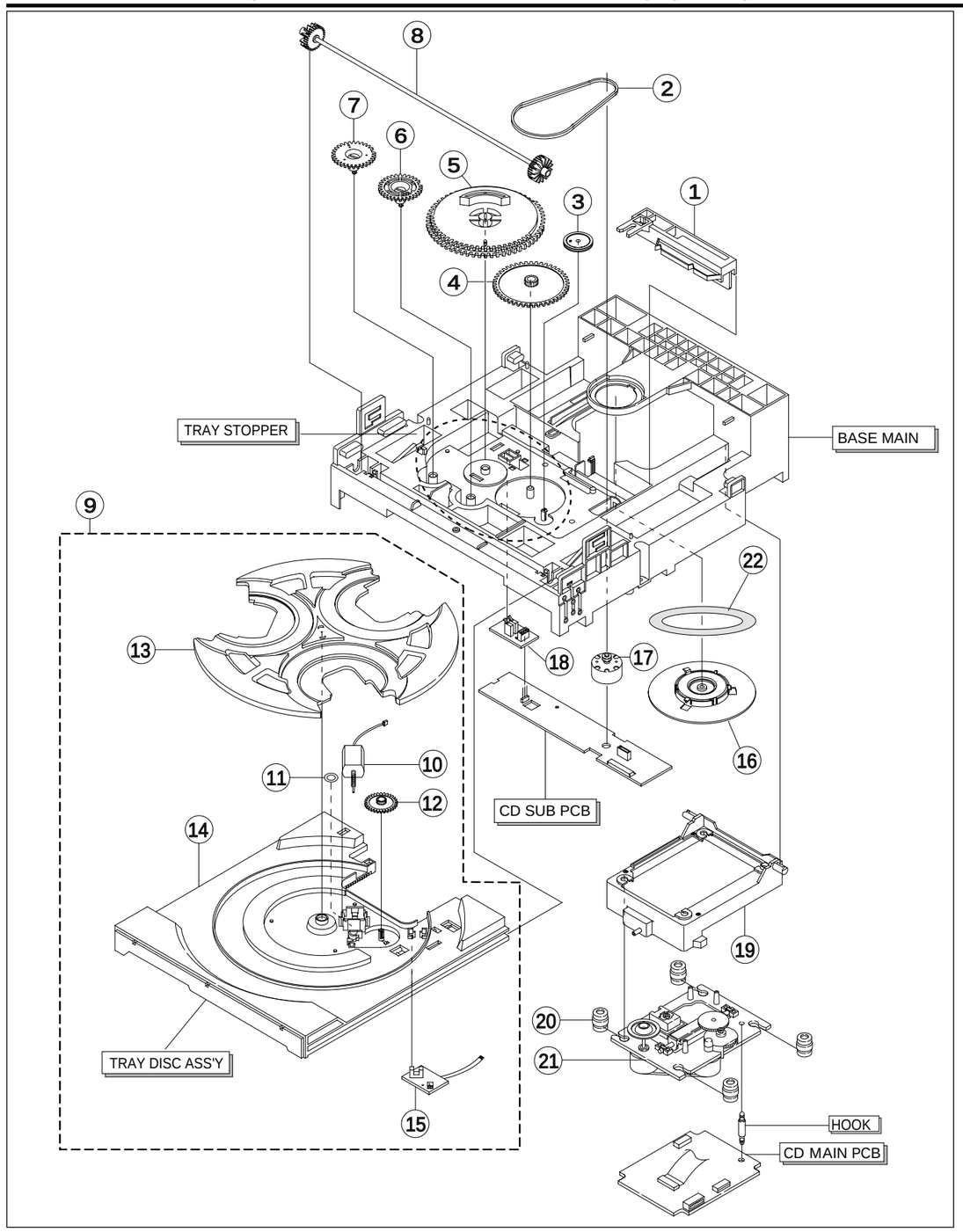
| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| 2 | AH64-30390A | CABINET-TOP | PCM 0.625T (D/GRAY) | |
| 3 | AH64-40431A | WINDOW-DOOR,A | PMMA VIOLET(LUCKY, 71129) | |
| 4 | AH64-40432A | WINDOW-DOOR,B | PMMA VIOLET(LUCKY, 71129) | |
| 5 | AH64-50335C | DOOR-CASS,A | ABS 94HB BLK | |
| 6 | AH64-50337C | DOOR-CASS,B | ABS 94HB BLK | |
| 7 | AH61-62004A | SPRING-EJECT,A | STS Ø1.1 | |
| 8 | AH61-62005A | SPRING-EJECT,B | STS Ø1.1 | |
| 9 | AH61-20480B | CAP-FRONT,E | MIPS 94HB BLK | |
| 10 | AH64-11222C | KNOB-JOG | ABS D/GRAY (HF-06660I,G3174) | |
| 11 | AH64-42002B | DECO-JOG | ABS NATURAL HF-0660I,G3174 | |
| 12 | AH64-42001C | DECO-FRONT | MIPS 94HB BLK | |
| 13 | AH64-11221C | KNOB-VOLUME | ABS D/GRAY (HF-0660I,G3174) | |
| 14 | AH64-40430C | WINDOW-VFD | PMMA VIOLET(LUCKY,41802) | |
| 16 | AH64-50336E | DOOR-CD | ABS 94HB BLK(LUCKY,41802) | |
| 17 | AH64-40429B | WINDOW-CD | PMMA VIOLET | |
| 18 | AH67-10162A | LENS-COM | ACRYL | |
| 19 | AH61-80030A | DAMPER-ASSY | HF-0660I, G3174 | |
| 20 | AH95-50001A | LATCH-ASSY | MAX-555 | |
| 21 | AH67-10164A | LENS-JOG | ACRYL | |
| 22 | AH64-11217B | KNOB-SRS | ABS D/GRAY (HF-0660I, G3174) | |
| 23 | AH64-11218D | KNOB-FUNCTION | ABS D/GRAY (HF-0660I, G3174) | |
| 24 | AH64-11219B | KNOB-DECK | ABS D/GRAY (HF-0660I, G3174) | |
| 25 | AH64-11223C | KNOB-POWER | ABS D/GRAY (HF-0660I, G3174) | |
| 26 | AH64-11216C | KNOB-CD OPEN | ABS D/GRAY (HF-0660I, G3174) | |
| 27 | AH67-10163A | LENS-CD | ACRYL | |
| 28 | AH67-10165A | LENS-ECHO | ACRYL | |
| 29 | AH64-30416A | CABINET-BOTTOM | SECC 1.0T | |
| 30 | AH64-30417D | CABINET-REAR | SECC 0.8T | |
| | AH64-30417E | | | |
| | AH64-30417F | | | |
| | AH64-30417J | | | |
| 31 | AH61-10747A | BRACKT-FAN | BRACKT-FAN | |
| 32 | AH31-10020A | FAN-DC | FAN-DC | |
| 33 | AH59-10120A | REMOCON-ASSY | REMOCON-ASSY | |

## 7-3 CD Mecha Exploded View and Parts List




| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| 1 | AH66-80022A | SLIDER-CAM | ABS HF-380 NTR | |
| 2 | AH66-60034A | BELT-LOAD | CR | |
| 3 | AH66-20186A | GEAR-PULLEY | POM(M90-44) WHT | |
| 4 | AH66-20187A | GEAR-LOAD | POM(M90-44) BLK | |
| 5 | AH66-20188A | GEAR-CAM | POM(M90-44) WHT | |
| 6 | AH66-20189A | GEAR-TRAY | POM(M90-44) BLK | |
| 7 | AH66-20190A | GEAR-CONVERT | POM(M90-44) WHT | |
| 8 | AH66-20191A | GEAR-SYNCRO | ABS HF-380 NTR | |
| 9 | AH59-10097A | ASSY-TRAY DISC | CMS-300, ASS'Y-TRAY | |
| 10 | AH59-10098A | ASS-WORM-MOTOR | CMS-300, ASS'Y-WORM | |
| 11 | AH69-20044A | CUSHION-MOTOR | NBR BLK | |
| 12 | AH66-20193A | GEAR-ROULETTE | POM(M90-44) BLK | |
| 13 | AH66-90056A | TRAY-ROULETTE | ABS XR-401 BLK | |
| 14 | AH66-90055A | TRAY-DISC | -,ABS,-,BLK | |
| 15 | AH59-10099A | ASSY-PCB SENSOR | CMS-300,ASS'Y SENSOR | |
| 16 | AH59-10100A | ASSY-TABLE CHUCK | CMS-300,ASS'Y CHUCK | |
| 17 | AH59-10101A | ASSY-PULLEY-MOTOR | CMS-300,ASS'Y CHUCK | |
| 19 | AH66-30086A | LEVER-LIFTER | ABS HF-380 BLK | |
| 20 | AH73-10016A | RUBBER-CD | IRR | |
| 21 | AJ59-20003F | DECK-CDP | DECK-CD *CMS-A30NM6 | |

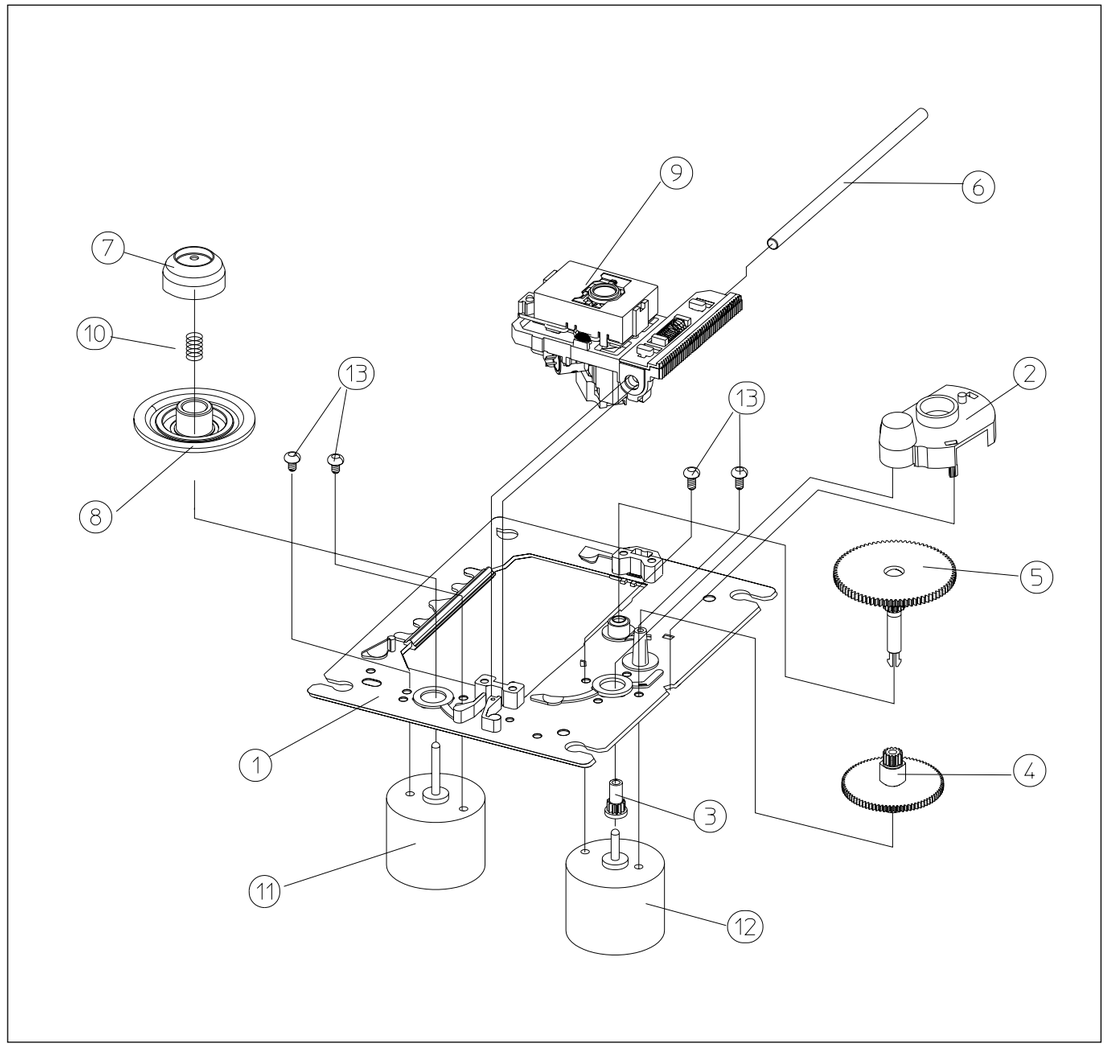
## 7-3 CD Mecha Exploded View and Parts List (Option)




| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| 1 | AH66-80022A | SLIDER-CAM | ABS HF-380 NTR | |
| 2 | AH66-60034A | BELT-LOAD | CR | |
| 3 | AH66-20186A | GEAR-PULLEY | POM(M90-44) WHT | |
| 4 | AH66-20187A | GEAR-LOAD | POM(M90-44) BLK | |
| 5 | AH66-20188A | GEAR-CAM | POM(M90-44) WHT | |
| 6 | AH66-20189A | GEAR-TRAY | POM(M90-44) BLK | |
| 7 | AH66-20190A | GEAR-CONVERT | POM(M90-44) WHT | |
| 8 | AH66-20191A | GEAR-SYNCRO | ABS HF-380 NTR | |
| 9 | AH59-10097A | ASSY-TRAY DISC | CMS-300, ASS'Y-TRAY | |
| 10 | AH59-10098A | ASS-WORM-MOTOR | CMS-300, ASS'Y-WORM | |
| 11 | AH69-20044A | CUSHION-MOTOR | NBR BLK | |
| 12 | AH66-20193A | GEAR-ROULETTE | POM(M90-44) BLK | |
| 13 | AH66-90056A | TRAY-ROULETTE | ABS XR-401 BLK | |
| 14 | AH66-90055A | TRAY-DISC | -,ABS,-,BLK | |
| 15 | AH59-10099A | ASSY-PCB SENSOR | CMS-300,ASS'Y SENSOR | |
| 16 | AH59-10100B | ASSY-TABLE CHUCK | CMS-300UD,TABLE-CHUCK ASSY | |
| 17 | AH59-10101A | ASSY-PULLEY-MOTOR | CMS-300,ASS'Y CHUCK | |
| 19 | AH66-30086A | LEVER-LIFTER | ABS HF-380 BLK | |
| 20 | AH73-10016A | RUBBER-CD | IRR | |
| 21 | AH59-20004Y | DECK-CDP | CMS-P30AM6UD | |
| 22 | AH63-70141A | SHEET-CHUCK | PVC 1.0 | |

# 7-4 CD Deck Exploded View and Parts List

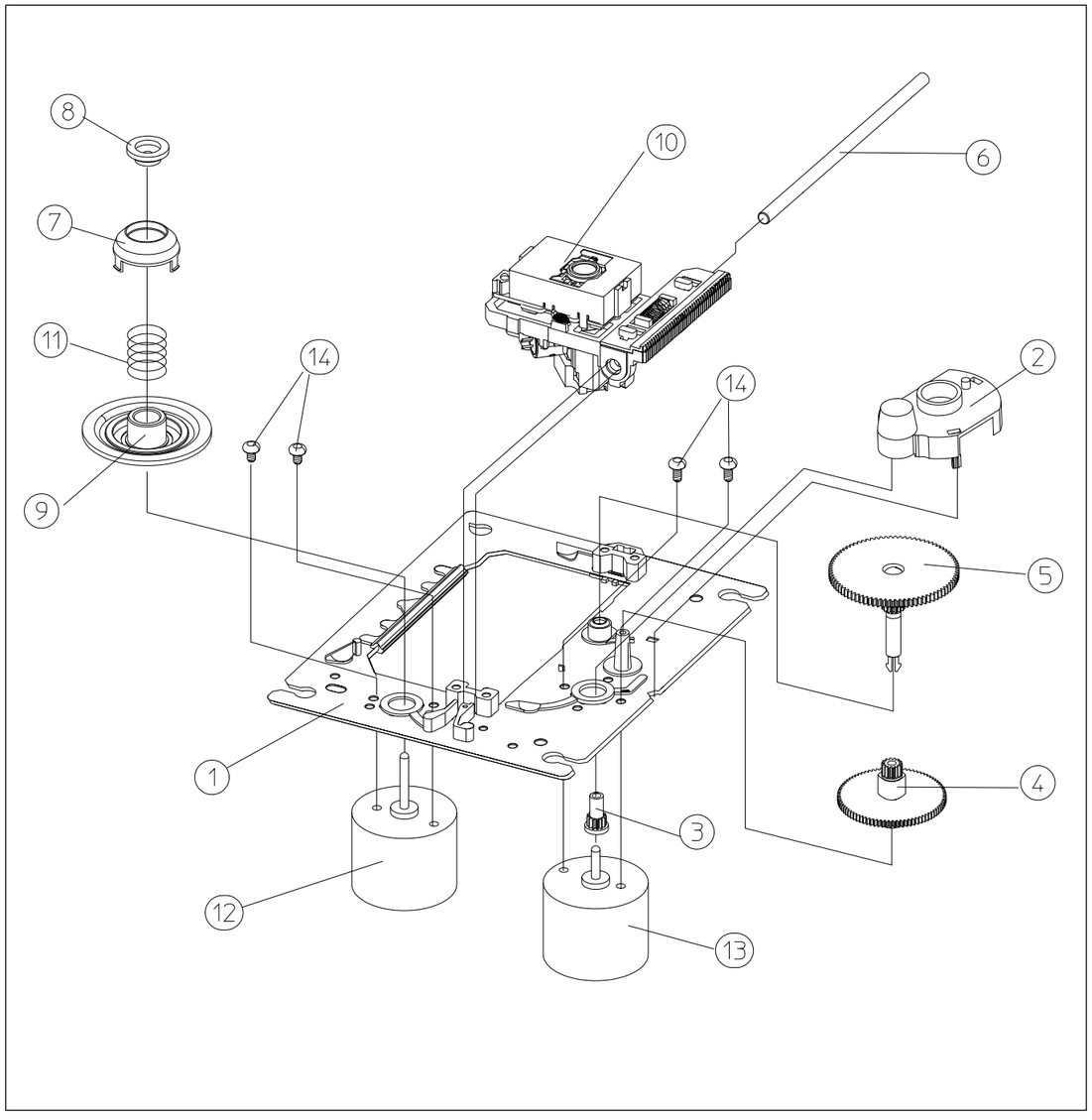
## 7-4-1 Exploded View




## 7-4-2 Parts List

| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| | AJ59-20003F | DECK-CD | CMS-P30NM6 | |
| 1 | AH61-10022C | CHASSIS-DECK(M) | CMSA30 POM M90-44 | |
| 2 | AH63-30048A | COVER-GEAR | CMS-V30 BLK ABS | |
| 3 | AH66-20016A | GEAR(A) | CMS-V30 M0.3 Z13 SP POM | |
| 4 | AH66-20017A | GEAR(B) | CMS-V30 M0.3 Z13 SP POM | |
| 5 | AH66-20018A | GEAR(C) | CMS-V30 M0.3 Z16/Z90 SP POM | |
| 6 | AH71-50036A | SHAFT-PU | CMS-V30 D3 L79 SUS420J2 | |
| 7 | 15253-503-011 | CENTER-RING | ABS+GS 20% CMS-V10N | |
| 8 | AH66-90018A | TURN-TABLE(M) | ABS+GS 20% CMS-V10N | |
| 9 | AJ30-20001B | PICK-UP CDP | P/U SOH-A1 ROW V-P/J | |
| 10 | AH61-60055A | SPRING-T/TABLE | CS STS-W PI0.4 D5.7 L9.3 CMS-V10N | |
| 11 | AH31-10009A | MOTOR-SPINDLE | RF-310T-11400 43L 25V 85mA | |
| 12 | AH31-10002B | MOTOR-FEED | RF-310ta 30MM NDM4RA3ETL 11.0MM | |
| 13 | AH60-10014A | SCREW-PH(+M2*3) | +M2X3 FE FZY W700 | |

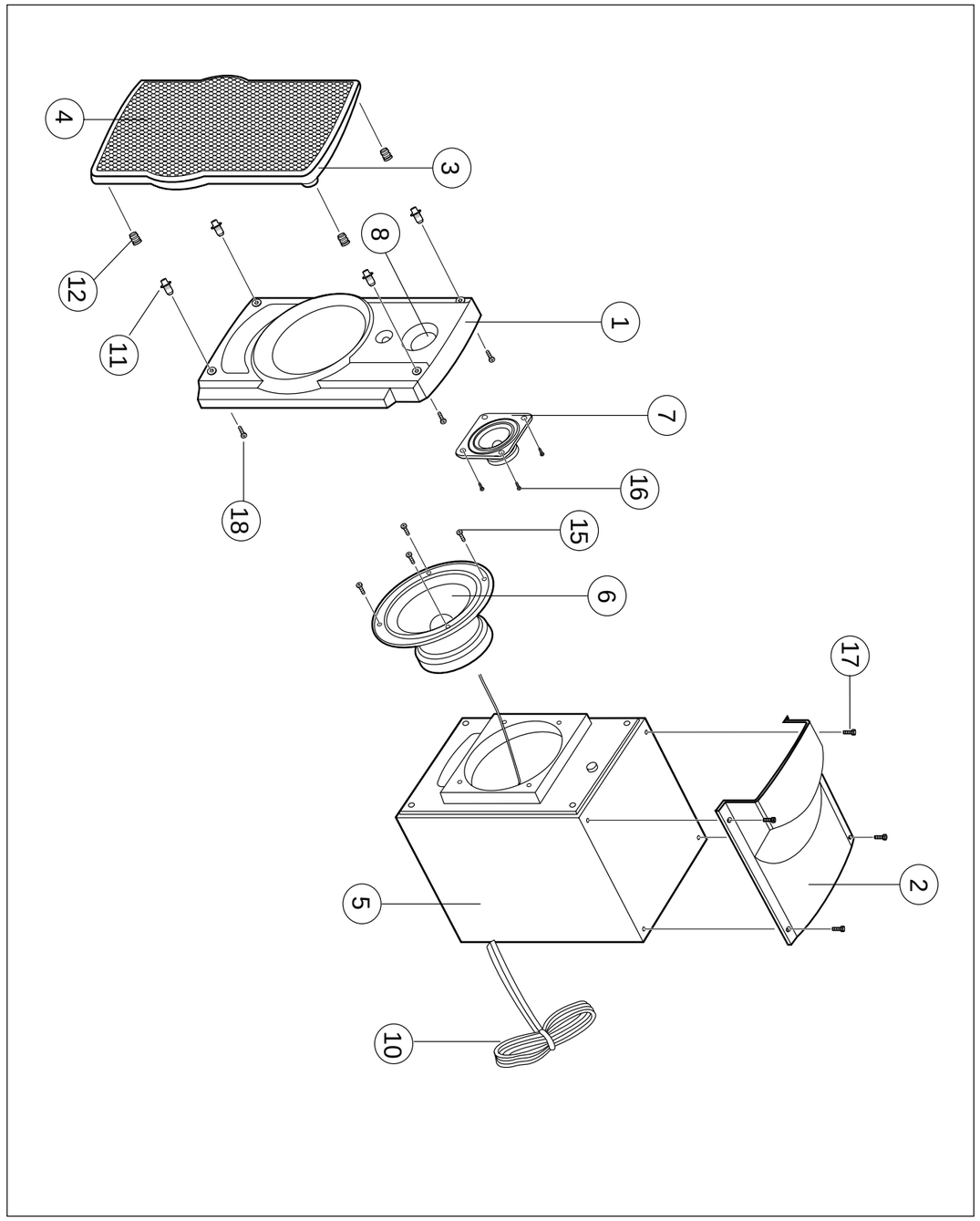
## 7-4 CD Deck Exploded View and Parts List (Option)




| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| | AH59-20004Y | DECK-CD | CMS-P30AM6UD | |
| 1 | AH61-10022B | CHASSIS-DECK(M) | CMSP30 POM M90-44 | |
| 2 | AH63-30048A | COVER-GEAR | CMS-V30 BLK ABS | |
| 3 | AH66-20016A | GEAR(A) | CMS-V30 M0.3 Z13 SP POM | |
| 4 | AH66-20017A | GEAR(B) | CMS-V30 M0.3 Z13 SP POM | |
| 5 | AH66-20018A | GEAR(C) | CMS-V30 M0.3 Z16/Z90 SP POM | |
| 6 | AH71-50036A | SHAFT-PU | CMS-V30 D3 L79 SUS 420J2 | |
| 7 | 15253-503-011 | CENTER-RING | ABS+GS 20% CMS-V10N | |
| 8 | AH64-10648A | CENTER-KNOB | ABS 94HB | |
| 9 | AH66-90029A | TURN-TABLE(M) | -,-,-,CMS-V30 | |
| 10 | AJ30-20001B | PICK-UP CDP | P/U SOH-A1 ROW V-P/J | |
| 11 | AH61-60055A | SPRING-T/TABLE | CS STS-W PI0.4 D5.7 L9.3 CMS-V10N | |
| 12 | AH31-10009A | MOTOR-SPINDLE | RF-310T-11400 43L 25V 85mA | |
| 13 | AH31-10002B | MOTOR-FEED | RF-310TA 30MM NDM4RA3ETL 11.0MM | |
| 14 | AH60-10014A | SCREW-PH(+M2*3) | +M2X3 FE FZY W700 | |

# 7-5 Speaker System

## 7-5-1 Exploded View




## 7-5-2 Parts List

| No. | Code No. | Description | Specification | Remarks |
|---|---|---|---|---|
| | AH59-90217A | SPEAKER-SYSTEM | PS880, EXPORT | |
| 1 | AH81-10977A | FRONT PANEL | 210 X 383.8 X 42.84 | |
| 2 | AH81-10977B | TOP PANEL | 210 X 230 X 73.3 | |
| 3 | AH81-10977C | NET FRAME | 196.0 X 377.8 X 10.4 | |
| 4 | AH81-10977D | PUNCHING | 179.4 X 365.2 X 0.6t | |
| 5 | AH81-10977H | CABINET | 209 X 302.5 X 230 | |
| 6 | AH81-10977S | WOOFER | SG16W50KFA | |
| 7 | AH81-10977T | TWEETER | SG06T13BFA | |
| 8 | AH81-10977U | PIEZO | ø28 | |
| 9 | AH81-10977G | BADGE | 35mm SAMSUNG | |
| 10 | AH81-10977K | CORD ASS'Y | ø5 X 0.5t, STEEL | |
| 11 | AH81-10977V | STEEL HOLDER | ø0.18 X 20 X 29 X 2.5 mm | |
| 12 | AH81-10977Q | NET HOLDER | ø17 X 12t | |
| 13 | AH81-10977N | DUCT CUSHION | 135 X 50 X 2t , EVA | |
| 14 | AH81-10977P | FOOT | ø 10 X 2t | |
| 15 | AH81-10977X | SCREW W/F | ø 4 X 14 BLK | |
| 16 | AH81-10977Y | SCREW T/W | ø 3 X 6 BLK | |
| 17 | AH81-10977Z | SCREW T/PANEL | ø 4 X 23mm BLK | |
| 18 | AH81-11054E | SCREW S/HOLDER | ø 3 X 8 BLK | |
| 19 | AH81-10977J | CAP HOLDER | ø 28, HIPS | |

# 8. Electrical Parts List

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| | 4301-000116 | BATTERY-LI;1.5V,500MA,AAA,10.2X44MM,- | |
| | AH26-80142X | TRANS-POWER;EI85.8X57,115/230V,50/60Hz,M | |
| | 0AH39-10002N | POWER CORD;EP2,SPT-1#2/18,2.0M,5239,UL/C | |

## AH90-10738N ASSY-MAIN PCB;MAX870,DOM S.N.A
## AH93-10006G ASSY-MAIN,MANU;MAX870,MAIN MANU DOM S.N.A

| | | | |
|---|---|---|---|
| AC4 | 2401-000375 | C-AL;100UF,5%,100V,GP,TP,10X20,5MM | |
| AC5 | 2401-000375 | C-AL;100UF,5%,100V,GP,TP,10X20,5MM | |
| AIC1 | 1201-001218 | IC-POWER AMP;417,SIP,22P,-,DUAL,40DB,PLA | |
| AIC1 | AH62-32001A | HEAT SINK-M;-,AL,-,T6,-,-,-,MAX853V | |
| AJ1 | 3716-000209 | TERMINAL-BLOCK;,-,-,60V,7A | |
| AJ2 | 3711-000820 | CONNECTOR-HEADER;BOX,2P,1R,2.5MM,STRAIGH | |
| BPF1L | AH26-10001A | TRANS-IF;FV-AD-BASE19K/38K,LOW PASS FILT | |
| BPF1R | AH26-10001A | TRANS-IF;FV-AD-BASE19K/38K,LOW PASS FILT | |
| DIC2 | 1205-000529 | IC-SWITCH;LC4966,DIP,14P,-,-,40V,300MW,- | |
| DX1 | 2802-000158 | RESONATOR-CERAMIC;4MHZ,0.5%,TP,10.0X5.0X | |
| FAN | AH31-10020A | FAN-DC;D0620B-12M,12VDC/0.16A, | |
| FIC2 | 1204-001281 | IC-AUDIO PROCESSOR;TDA7439,DIP,30P,400MI | |
| FJ1 | 3711-003771 | CONNECTOR-HEADER;2WALL,32P,1R,1.25mm,ANG | |
| FJ2 | 3711-003735 | CONNECTOR-HEADER;BOX,20P,2R,2.54MM,ANGLE | |
| HJ1 | 3722-000363 | JACK-PHONE;9P,6.4MM,AU,BLK,- | |
| IFE1 | AH40-10001U | TUNER;FE337-A05,-,75OHM | |
| RBD1 | 0402-001010 | DIODE-BRIDGE;GBU6D,200V,6A,SIP-4 | |
| RBD12 | AH62-30127A | HEAT SINK-TR;-,AL,-,T2.0,-,WHT,-,MAX870 | |
| RBD2 | 0402-001010 | DIODE-BRIDGE;GBU6D,200V,6A,SIP-4 | |
| RC10 | 2401-001942 | C-AL;3300UF,20%,35V,GP,BK,18X35.5MM | |
| RC15 | 2401-000375 | C-AL;100UF,5%,100V,GP,TP,10X20,5MM | |
| RC7 | 2401-003267 | C-AL;4700UF,20%,80V,GP,BK,30X40,10 | |
| RC8 | 2401-003267 | C-AL;4700UF,20%,80V,GP,BK,30X40,10 | |
| RC9 | 2401-001942 | C-AL;3300UF,20%,35V,GP,BK,18X35.5MM | |
| RIC2 | 1203-000276 | IC-POSI.FIXED REG.;7805,TO-220,3P,-,PLAS | |
| RIC2 | AH62-30060A | HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-7000,- | |
| RIC3 | 1203-000110 | IC-NEGA.FIXED REG.;7912,TO-220,3P,-,PLAS | |
| RIC3 | AH62-30060A | HEAT SINK-CD;AL,-,T1.0,-,-,-,SCM-7000,- | |
| RIC5 | 1203-000242 | IC-POSI.FIXED REG.;7812,TO-220,3P,-,PLAS | |
| RQ1 | 0502-000425 | TR-POWER;2SD2395-F,NPN,2W,TO-220FN,BK,1 | |
| RQ11 | 0502-000303 | TR-POWER;KSD882,NPN,1W,TO-126,TP,160-32 | |
| RQ2 | 0502-000424 | TR-POWER;2SB1566-F,PNP,2W,TO-220FN,BK,1 | |
| RQ3 | 0502-000425 | TR-POWER;2SD2395-F,NPN,2W,TO-220FN,BK,1 | |
| RQ6 | 0502-000424 | TR-POWER;2SB1566-F,PNP,2W,TO-220FN,BK,1 | |
| RR14 | 13954-100-310 | CERAMIC-PIPE;PI1.4 15MM WHT | |
| RR14 | 2003-000314 | R-METAL OXIDE;47OHM,5%,2W,AE,TP,6X16MM | |
| RR18 | 13954-100-310 | CERAMIC-PIPE;PI1.4 15MM WHT | |
| RR18 | 2003-000473 | R-METAL OXIDE(S);10OHM,5%,3W,AA,TP,6X16M | |
| RWA1 | AH39-20560P | LEAD CONNECTOR-ASSY;-,5264,51088,8p,300m | |
| TFL1 | 2903-000105 | FILTER-CERAMIC;BP,10.7MHZ+-25KHZ,180KHZ+ | |
| TFL3 | 2903-000105 | FILTER-CERAMIC;BP,10.7MHZ+-25KHZ,180KHZ+ | |
| TFL4 | 2903-000148 | FILTER-CERAMIC;BP,450KHZ+-1KHZ,-,6DB,-,B | |
| TIC1 | AH14-10007H | IC;LA1836,DIP,STICK IF+MPX | |
| TIC2 | AH14-10007G | IC;LC72131,DIP,STICK PLL | |
| TJ2 | 3716-000201 | TERMINAL-BLOCK;NON SOLDER,4P,4MM,-, | |
| TL1 | AH27-80060A | COIL-OSC;RBW07VB,345UH,AM+RF | |
| TL2 | AH26-10001E | TRANS-IF;KS940228-09,-,-,7.6X12.0,-,450K | |
| TL3 | AH26-10020A | TRANS-DET;-,7KLL,DET,-,7.8MM,91PF,11.32M | |
| TX1 | 2802-000215 | RESONATOR-CERAMIC;19KHZ,+-38HZ,-,7.0X3.5 | |
| TX2 | 2801-003152 | CRYSTAL-UNIT;7.2MHZ,20PPM,28-AAS,12PF,50 | |
| VJ1 | 3722-000377 | JACK-RCA;4P/2C,3.5MM,SN,BLK,#16~22 | |
| VWA1 | 3711-002809 | CONNECTOR-HEADER;BOX,8P,1R,2MM,STRAIGHT, | |

## AH93-20003U ASSY-MAIN,CHIP;MAX870,MAIN,CHIP DOM S.N.A

| | | | |
|---|---|---|---|
| AC1 | 2203-000609 | C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012, | |
| AC2L | 2203-001640 | C-CERAMIC,CHIP;390PF,10%,50V,X7R,TP,1608 | |
| AC2R | 2203-001640 | C-CERAMIC,CHIP;390PF,10%,50V,X7R,TP,1608 | |
| AR16R | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| AR22 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| AR23 | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| AR2L | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| AR2R | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| AR3R | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| AR4R | 2007-001039 | R-CHIP;56Kohm,5%,1/10W,DA,TP,2012 | |
| AR5L | 2007-000241 | R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012 | |
| AR5R | 2007-000241 | R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012 | |
| AR9 | 2007-001208 | R-CHIP;82Kohm,5%,1/10W,DA,TP,2012 | |
| AR9R | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| D1C4 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M | |
| D1C5 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M | |
| DC11 | 2203-000953 | C-CERAMIC,CHIP;470pF,5%,50V,NPO,TP,2012, | |
| DC17 | 2203-001550 | C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012 | |
| DC18 | 2203-001143 | C-CERAMIC ;68nF,10%,50V,X7R,2012,2mm,TP | |
| DC19 | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| DC2 | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| DC20 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| DC21 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| DC22 | 2203-000919 | C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP, | |
| DC24 | 2203-001524 | C-CERAMIC,CHIP;47pF,5%,50V,NPO,TP,2012,- | |
| DC25 | 2203-001524 | C-CERAMIC,CHIP;47pF,5%,50V,NPO,TP,2012,- | |
| DC26 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| DC27 | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| DC28 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| DC29 | 2203-000919 | C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP, | |
| DC32 | 2203-000363 | C-CERAMIC,CHIP;150pF,5%,50V,NPO,TP,2012, | |
| DC33 | 2203-000363 | C-CERAMIC,CHIP;150pF,5%,50V,NPO,TP,2012, | |
| DC8 | 2203-000661 | C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012, | |
| DC9 | 2203-000661 | C-CERAMIC,CHIP;270pF,5%,50V,NPO,TP,2012, | |
| DIC1 | AH14-10007E | IC;M65846FP,SOP,STICK DSP/ECHO | |
| DIC3 | 1201-000463 | IC-OP AMP;074,SOP,14P,196MIL,SINGLE,88DB | |
| DR0 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| DR1 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| DR11 | 2007-000710 | R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012 | |
| DR13 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| DR14 | 2007-001208 | R-CHIP;82Kohm,5%,1/10W,DA,TP,2012 | |
| DR15 | 2007-000241 | R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012 | |
| DR16 | 2007-001208 | R-CHIP;82Kohm,5%,1/10W,DA,TP,2012 | |
| DR17 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| DR19 | 2007-000001 | R-CHIP;68Kohm,5%,1/10W,DA,TP,2012 | |
| DR2 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| DR23 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| DR24 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| DR25 | 2007-001028 | R-CHIP;560ohm,1%,1/10W,DA,TP,2012 | |
| DR26 | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| DR29 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |

## Electrical Parts List

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| DR30 | 2007-001028 | R-CHIP;560ohm,1%,1/10W,DA,TP,2012 | |
| DR31 | 2007-000001 | R-CHIP;68Kohm,5%,1/10W,DA,TP,2012 | |
| DR32 | 2007-000001 | R-CHIP;68Kohm,5%,1/10W,DA,TP,2012 | |
| DR33 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| DR34 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| DR37 | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| DR4 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| DR40 | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| DR45 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| DR46 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| DR47 | 2007-001208 | R-CHIP;82Kohm,5%,1/10W,DA,TP,2012 | |
| DR48 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| DR49 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| DR55 | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| DR56 | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| DR57 | 2007-000477 | R-CHIP;1Mohm,5%,1/10W,DA,TP,2012 | |
| DR6 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| DR74 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| DR9 | 2007-001208 | R-CHIP;82Kohm,5%,1/10W,DA,TP,2012 | |
| F1C1 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M | |
| FR10L | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| FR10R | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| FR1L | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| FR1R | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| FR2L | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| FR2R | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| FR3L | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| FR3R | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| FR4R | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| FR5L | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| FR5R | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| FR6L | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| FR6R | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| FR8L | 2007-000518 | R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012 | |
| FR9L | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| FR9R | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| H1C1 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M | |
| HR2R | 2007-000766 | R-CHIP;330ohm,5%,1/10W,DA,TP,2012 | |
| HR3L | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| HR3R | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| HR4L | 2007-000241 | R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012 | |
| HR4R | 2007-000241 | R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012 | |
| J1 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J10 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J11 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J12 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J13 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J14 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J16 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J18 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J19 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J2 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J20 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J21 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J3 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J30 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J31 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J4 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J5 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| J9 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| RR13 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| RR2 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| RR9 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| TC1 | 2203-000609 | C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012, | |
| TC100 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| TC11 | 2203-000408 | C-CERAMIC,CHIP;180pF,5%,50V,NPO,TP,2012, | |
| TC12 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| TC14 | 2203-000609 | C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012, | |
| TC16 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| TC17 | 2203-000429 | C-CERAMIC,CHIP;18pF,5%,50V,NPO,TP,2012,- | |
| TC2 | 2203-001517 | C-CERAMIC,CHIP;15pF,5%,50V,NPO,TP,2012,- | |
| TC23 | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| TC24 | 2203-001223 | C-CERAMIC,CHIP;820PF,10%,50V,X7R,2012,2. | |
| TC26 | 2203-000802 | C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012, | |
| TC27 | 2203-000802 | C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012, | |
| TC3 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| TC34 | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| TC35 | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| TC37 | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| TC38 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| TC41 | 2203-001611 | C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,2 | |
| TC42 | 2203-001517 | C-CERAMIC,CHIP;15pF,5%,50V,NPO,TP,2012,- | |
| TC5 | 2203-000609 | C-CERAMIC,CHIP;22nF,10%,50V,X7R,TP,2012, | |
| TC6 | 2203-001137 | C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V,TP,2 | |
| TC8 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| TC91 | 2203-000595 | C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012, | |
| TC92 | 2203-000595 | C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012, | |
| TR1 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| TR10 | 2007-000308 | R-CHIP;10ohm,5%,1/10W,DA,TP,2012 | |
| TR11 | 2007-000572 | R-CHIP;220ohm,5%,1/10W,DA,TP,2012 | |
| TR12 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| TR13 | 2007-000572 | R-CHIP;220ohm,5%,1/10W,DA,TP,2012 | |
| TR15 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| TR18 | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| TR19 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| TR2 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR23 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| TR26 | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| TR27 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR28 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR29 | 2007-000710 | R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012 | |
| TR30 | 2007-000593 | R-CHIP;22ohm,5%,1/10W,DA,TP,2012 | |
| TR31 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| TR33 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| TR34 | 2007-001071 | R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012 | |
| TR36 | 2007-001071 | R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012 | |
| TR4 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| TR40 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR41 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR42 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR44 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| TR46 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| TR47 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR48 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| TR49 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| TR5 | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| TR50 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| TR51 | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| TR6 | 2007-001028 | R-CHIP;560ohm,1%,1/10W,DA,TP,2012 | |
| TR7 | 2007-000518 | R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012 | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| TR8 | 2007-000822 | R-CHIP;390ohm,5%,1/10W,DA,TP,2012 | |
| TR9 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| VC2L | 2203-000595 | C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012, | |
| VC2R | 2203-000595 | C-CERAMIC,CHIP;220pF,5%,50V,NPO,TP,2012, | |
| VR1L | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| VR1R | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| VR2L | 2007-001177 | R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012 | |
| VR2R | 2007-001177 | R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012 | |

## AH93-30005N ASSY-MAIN,TAPG;MAX870,MAIN,AUTO DOM S.N.A

| | | | |
|---|---|---|---|
| AC1L | 2401-001954 | C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5 | |
| AC1R | 2401-001954 | C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5 | |
| AC21 | 2401-001954 | C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5 | |
| AC22 | 2401-001572 | C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM | |
| AC3L | 2401-001954 | C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5 | |
| AC3R | 2401-001954 | C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5 | |
| AC4L | 2401-001895 | C-AL;100uF,20%,16V,GP,6.3x11mm,2.5m | |
| AC4R | 2401-001895 | C-AL;100uF,20%,16V,GP,6.3x11mm,2.5m | |
| AC5L | 2201-000619 | C-CERAMIC,DISC;5pF,0.3pF,50V,CH,TP,7x4,5 | |
| AC5R | 2201-000619 | C-CERAMIC,DISC;5pF,0.3pF,50V,CH,TP,7x4,5 | |
| AC6 | 2401-000385 | C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M | |
| AC7 | 2401-000385 | C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M | |
| AC8 | 2401-000385 | C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M | |
| AC9 | 2401-000385 | C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M | |
| AC9L | 2301-000375 | C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7 | |
| AC9R | 2301-000375 | C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7 | |
| AD10 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| AD11 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| AD2 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| AD3 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| AD4 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| AD5 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| AD6 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| AQ10 | 0501-000294 | TR-SMALL SIGNAL;KSA708-Y,PNP,800mW,TO-92 | |
| AQ11 | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9 | |
| AQ1L | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9 | |
| AQ1R | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9 | |
| AQ3 | 0504-000146 | TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO- | |
| AQ4 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO- | |
| AQ7 | 0504-000146 | TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO- | |
| AQ8L | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9 | |
| AR10 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| AR11 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| AR12 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| AR13 | 2004-000798 | R-METAL;33Kohm,1%,1/8W,AA,TP,1.8x3.2mm | |
| AR14 | 2001-000028 | R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| AR15 | 2001-000028 | R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| AR16 | 2001-000588 | R-CARBON;3.3Kohm,5%,1/4W,AA,TP,2.4x6.4m | |
| AR17 | 2001-000588 | R-CARBON;3.3Kohm,5%,1/4W,AA,TP,2.4x6.4m | |
| AR1L | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| AR1R | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| AR20 | 2001-000786 | R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| AR21 | 2001-000786 | R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| AR3L | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| AR4L | 2001-000858 | R-CARBON;56KOHM,1%,1/8W,AD,TP,1.8X3.2MM | |
| AR6L | 2001-000858 | R-CARBON;56KOHM,1%,1/8W,AD,TP,1.8X3.2MM | |
| AR6R | 2001-000858 | R-CARBON;56KOHM,1%,1/8W,AD,TP,1.8X3.2MM | |
| AR8 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| AR8L | 2003-000468 | R-METAL OXIDE(S);10OHM,5%,1W,AA,TP,3.3X9 | |
| AR8R | 2003-000468 | R-METAL OXIDE(S);10OHM,5%,1W,AA,TP,3.3X9 | |
| AZD1 | 0403-000363 | DIODE-ZENER;UZ6.8BH,6.8V,6.8-7.2V,500MW | |
| AZD2 | 0403-000363 | DIODE-ZENER;UZ6.8BH,6.8V,6.8-7.2V,500MW | |
| DC0 | 2401-001954 | C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5 | |
| DC1 | 2401-001968 | C-AL;470NF,20%,50V,GP,TP,5X11MM,5 | |
| DC10 | 2401-000438 | C-AL;10UF,20%,25V,GP,-,5X11,2MM | |
| DC12 | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| DC13 | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| DC14 | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| DC15 | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| DC16 | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| DC18 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| DC23 | 2401-001895 | C-AL;100uF,20%,16V,GP,6.3x11mm,2.5m | |
| DC3 | 2401-001887 | C-AL;100NF,20%,50V,-,TP,4X7MM,5 | |
| DC4 | 2401-001887 | C-AL;100NF,20%,50V,-,TP,4X7MM,5 | |
| DC5 | 2401-000438 | C-AL;10UF,20%,25V,GP,-,5X11,2MM | |
| DC6 | 2401-000438 | C-AL;10UF,20%,25V,GP,-,5X11,2MM | |
| DC7 | 2401-000438 | C-AL;10UF,20%,25V,GP,-,5X11,2MM | |
| DQ1 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO- | |
| DQ2 | 0504-000146 | TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO- | |
| DQ3 | 0504-000203 | TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO- | |
| DR10 | 2001-001000 | R-CARBON;82KOHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| DR12 | 2001-000563 | R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR18 | 2001-000515 | R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR20 | 2001-000411 | R-CARBON;18Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR21 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR22 | 2001-000472 | R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| DR27 | 2001-000660 | R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR28 | 2001-000660 | R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR3 | 2001-000515 | R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR35 | 2001-000273 | R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| DR36 | 2001-000273 | R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| DR43 | 2003-000500 | R-METAL OXIDE(S);150ohm,5%,1W,AA,TP,3.3x | |
| DR44 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR5 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR7 | 2001-000522 | R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DR71 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| DR72 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| DR73 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| DR8 | 2001-000786 | R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| DZD1 | 0403-000354 | DIODE-ZENER;UZ5.1B,5.1V,4.8-5.4V,500MW,D | |
| FC1 | 2401-000438 | C-AL;10UF,20%,25V,GP,-,5X11,2MM | |
| FC10L | 2301-000375 | C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7 | |
| FC10R | 2301-000375 | C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7 | |
| FC11L | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| FC11R | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| FC1L | 2401-000475 | C-AL;10UF,20%,50V,GP,-,5X11,2MM | |
| FC1R | 2401-000475 | C-AL;10UF,20%,50V,GP,-,5X11,2MM | |
| FC2 | 2401-000438 | C-AL;10UF,20%,25V,GP,-,5X11,2MM | |
| FC2L | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| FC2R | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| FC3 | 2401-001102 | C-AL;330UF,20%,16V,GP,TP,8X12,5 | |
| FC3L | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| FC3R | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| FC4 | 2401-000475 | C-AL;10UF,20%,50V,GP,-,5X11,2MM | |
| FC4L | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| FC4R | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| FC5 | 2301-000412 | C-FILM,PEF;22NF,10%,50V,TP,6.5X10.5X4MM, | |
| FC5L | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| FC5R | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| FC6L | 2301-000453 | C-FILM,PEF;5.6NF,10%,50V,TP,5.5X7X3MM,5M | |
| FC6R | 2301-000453 | C-FILM,PEF;5.6NF,10%,50V,TP,5.5X7X3MM,5M | |
| FC7L | 2301-000393 | C-FILM,PEF;18NF,10%,50V,TP,6.5X12.5X3.5M | |
| FC7R | 2301-000393 | C-FILM,PEF;18NF,10%,50V,TP,6.5X12.5X3.5M | |
| FC8L | 2301-000412 | C-FILM,PEF;22NF,10%,50V,TP,6.5X10.5X4MM, | |
| FC8R | 2301-000412 | C-FILM,PEF;22NF,10%,50V,TP,6.5X10.5X4MM, | |
| FC9L | 2301-000375 | C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7 | |
| FC9R | 2301-000375 | C-FILM,PEF;100NF,5%,50V,TP,11X12.5X6.5,7 | |
| FD1 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| FQ1 | 0504-000146 | TR-DIGITAL;KSR2004,PNP,300MW,47K-47K,TO- | |
| FQ1L | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| FQ1R | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| FR1 | 2001-000111 | R-CARBON;150ohm,5%,1/4W,AA,TP,2.4x6.4mm | |
| FR2 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| FR4L | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| FR7L | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| FR7R | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| FR8R | 2001-000472 | R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| FRONT | AH41-10537A | PCB-MAIN MAX870;MAX870,1L,FR-1,330*247*1 | |
| HC1 | 2401-001364 | C-AL;470UF,20%,16V,GP,TP,10X12MM,5M | |
| HC1L | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| HC1R | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| HC2 | 2401-001364 | C-AL;470UF,20%,16V,GP,TP,10X12MM,5M | |
| HC2L | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| HC2R | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| HC4 | 2401-001954 | C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5 | |
| HD1 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| HD2 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| HD3 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| HD4 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| HD5 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| HD6 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| HQ1L | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9 | |
| HQ1R | 0501-000407 | TR-SMALL SIGNAL;KSD471A-Y,NPN,800mW,TO-9 | |
| HR1 | 2004-000207 | R-METAL;100ohm,5%,1/4W,AA,TP,2.4x6.4mm | |
| HR1L | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| HR1R | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| HR2 | 2001-000027 | R-CARBON;100ohm,5%,1/4W,AA,TP,2.4x6.4mm | |
| HR2L | 2001-000003 | R-CARBON;330ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| HR3 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| HR5L | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| HR5R | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| HR6L | 2001-000302 | R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| HR6R | 2001-000302 | R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| RC0 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| RC12 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| RC13 | 2401-001572 | C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM | |
| RC14 | 2401-001572 | C-AL;47UF,20%,50V,GP,-,6.3X11,2.5MM | |
| RC16 | 2201-000161 | C-CERAMIC,DISC;10nF,+80-20%,500V,Y5V,TP, | |
| RC17 | 2201-000161 | C-CERAMIC,DISC;10nF,+80-20%,500V,Y5V,TP, | |
| RC19 | 2401-001919 | C-AL;2.2UF,20%,50V,-,TP,4X7MM,5 | |
| RC2 | 2401-001938 | C-AL;22UF,20%,25V,GP,BK,5X11MM,2MM | |
| RC3 | 2401-000438 | C-AL;10UF,20%,25V,GP,-,5X11,2MM | |
| RC5 | 2401-001938 | C-AL;22UF,20%,25V,GP,BK,5X11MM,2MM | |
| RD1 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| RD3 | 0402-000151 | DIODE-RECTIFIER;1N5392,100V,1.5A,DO-15 | |
| RD4 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| RD5 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| RD6 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| RD7 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| RQ12 | 0501-000010 | TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m | |
| RQ4 | 0501-000296 | TR-SMALL SIGNAL;KSA709-Y,PNP,800mW,TO-92 | |
| RQ5 | 0501-000010 | TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m | |
| RQ7 | 0501-000010 | TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m | |
| RR1 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| RR11 | 2001-000019 | R-CARBON(S);10ohm,5%,1/2W,AA,TP,2.4x6.4m | |
| RR12 | 2004-000903 | R-METAL;4.7KOHM,5%,1/2W,AA,TP,3.3X9MM | |
| RR19 | 2001-000780 | R-CARBON;470ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| RR20 | 2001-000613 | R-CARBON;3.9Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| RR21 | 2001-000890 | R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| RR22 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| RR23 | 2001-001153 | R-CARBON(S);47OHM,5%,1/2W,AA,TP,2.4X6.4M | |
| RR24 | 2001-001153 | R-CARBON(S);47OHM,5%,1/2W,AA,TP,2.4X6.4M | |
| RR26 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| RR27 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| RR28 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| RR3 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| RR4 | 2001-000802 | R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| RR8 | 2001-001178 | R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| RZD1 | 0403-000399 | DIODE-ZENER;UZP9.1B,9.1V,8.5-9.6V,1W,DO | |
| RZD3 | 0403-000357 | DIODE-ZENER;UZ5.6BM,5.6V,5.4-5.8V,500MW | |
| RZD4 | 0403-000357 | DIODE-ZENER;UZ5.6BM,5.6V,5.4-5.8V,500MW | |
| RZD5 | 0403-000564 | DIODE-ZENER;TZP16A,16V,15.3-17.1V,1W,DO- | |
| RZD6 | 0403-000564 | DIODE-ZENER;TZP16A,16V,15.3-17.1V,1W,DO- | |
| TC10 | 2401-000303 | C-AL;100uF,20%,25V,GP,TP,6.3x11,2.5 | |
| TC101 | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | |
| TC13 | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| TC15 | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| TC17 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| TC18 | 2401-001968 | C-AL;470NF,20%,50V,GP,TP,5X11MM,5 | |
| TC19 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| TC20 | 2401-001022 | C-AL;3.3UF,20%,50V,GP,-,5X11,2MM | |
| TC21 | 2202-000854 | C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP, | |
| TC22 | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| TC25 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| TC29 | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| TC31 | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| TC32 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| TC33 | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| TC36 | 2401-002189 | C-AL;330uF,20%,10V,GP,BK,8x11.5mm,5 | |
| TC39 | 2401-001968 | C-AL;470NF,20%,50V,GP,TP,5X11MM,5 | |
| TC4 | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| TC40 | 2401-000303 | C-AL;100uF,20%,25V,GP,TP,6.3x11,2.5 | |
| TC9 | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| TD1 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| TD2 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| TD3 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| TD4 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| TD7 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| TD8 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| TQ2 | 0501-000392 | TR-SMALL SIGNAL;KSC838-O,NPN,250MW,TO-92 | |
| TQ3 | 0501-000392 | TR-SMALL SIGNAL;KSC838-O,NPN,250MW,TO-92 | |
| TQ4 | 0501-000294 | TR-SMALL SIGNAL;KSA708-Y,PNP,800mW,TO-92 | |
| TQ5 | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| TQ6 | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| TQ7 | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| TR16 | 2001-000527 | R-CARBON;22OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| TR17 | 2001-000802 | R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| TR24 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR25 | 2001-000008 | R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR3 | 2001-000449 | R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| TR32 | 2001-000302 | R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR35 | 2001-000563 | R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR37 | 2001-000563 | R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR38 | 2001-000117 | R-CARBON(S);68ohm,5%,1/2W,AA,TP,2.4x6.4m | |
| TR39 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR43 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR45 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| TR50 | 2001-000938 | R-CARBON;68OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| TR52 | 2001-000977 | R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| TR53 | 2001-000855 | R-CARBON;560ohm,5%,1/4W,AA,TP,2.4x6.4mm | |
| TSR1 | 2103-000290 | VR-SEMI;20KOHM,30%,1/10W,TOP | |
| TSR2 | 2103-000492 | VR-SEMI;5KOHM,30%,1/10W,TOP | |
| TZD1 | 0403-000562 | DIODE-ZENER;MTZ7.5B,7.5V,7.07-7.45V,500m | |
| TZD2 | 0403-000393 | DIODE-ZENER;UZP5.1B,5.1V,4.8-5.4V,1W,DO | |
| VC1L | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |
| VC1R | 2401-001912 | C-AL;1uF,20%,50V,GP,5x11mm,2mm,BK | |

## AH90-10739D ASSY-FRONT PCB;MAX870,SPA

## AH93-10005R ASSY-FRONT,MANU;MAX870,FRONT MANU SPA

| | | | |
|---|---|---|---|
| EVR1 | 3406-001022 | SWITCH-ROTARY;5V,0.5MA,24PULSE/NO CLICK, | |
| FCW2 | 3708-000454 | CONNECTOR-FPC/FC/PIC;22P,1.25MM,STRAIGHT | |
| FCW2 | 3809-001034 | CABLE-FLAT;30V,80C,170MM,22P,1.25MM,UL28 | |
| FCW3 | 3708-000449 | CONNECTOR-FPC/FC/PIC;7P,1.25MM,STRAIGHT, | |
| FCW3-1 | 3708-000307 | CONNECTOR-FPC/FC/PIC;7P,1.25MM,ANGLE,SN | |
| FCW3-1 | 3809-001092 | CABLE-FLAT;30V,80C,300mm,7P,1.25mm,UL289 | |
| MJOG1 | 3406-001023 | SWITCH-ROTARY;5V,0.5MA,24DETENT/CLICK,12 | |
| R-EYE | AH59-60001J | MODULE-REMOCON;GP1U271R,38KHZ,-,MESH,-, | |
| UIC3 | 1204-000156 | IC-EQUALIZER;BA3834S,DIP,18P,-,PLASTIC,7 | |
| UX1 | 2802-000181 | RESONATOR-CERAMIC;6MHZ,0.3%,BK,9.0X4.0X7 | |
| UX2 | 2801-001394 | CRYSTAL-UNIT;32.768KHz,20ppm,28-AAY,12.5 | |
| VFD | AH61-20483A | HOLDER-VFD;-,ABS,94HB,BLK,-,MAX870 | |
| VFD1 | AH07-20045T | VF-DISPLAY;SVA-16MM16 3##,16SEG,125.0x40 | |

## AH93-20004J ASSY-MAIN,CHIP;MAX870,FRONT,CHIP SPA

| | | | |
|---|---|---|---|
| MIC1 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M | |
| MR3 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UC100 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| UC101 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| UC101 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| UC23 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| UC5 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| UC54 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| UC55 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| UC57 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| UC58 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| UC9 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| UC99 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| UIC1 | AH09-10062Y | IC-MCU;LC866548V-XXXX,100P,QFP,MAX850 | |
| UIC2 | AH14-10004L | IC;NJU3718,SOP,BULK | |
| UIC5 | 0801-000305 | IC-CMOS LOGIC;7SU04,INVERTER,SOP,5P,150M | |
| UR106 | 2007-000401 | R-CHIP;150ohm,5%,1/10W,DA,TP,2012 | |
| UR113 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR115 | 2007-001028 | R-CHIP;560ohm,1%,1/10W,DA,TP,2012 | |
| UR118 | 2007-000401 | R-CHIP;150ohm,5%,1/10W,DA,TP,2012 | |
| UR120 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR130 | 2007-000221 | R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR131 | 2007-001177 | R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR135 | 2007-001201 | R-CHIP;820ohm,5%,1/10W,DA,TP,2012 | |
| UR137 | 2007-000023 | R-CHIP;120ohm,5%,1/10W,DA,TP,2012 | |
| UR140 | 2007-000518 | R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR142 | 2007-001201 | R-CHIP;820ohm,5%,1/10W,DA,TP,2012 | |
| UR143 | 2007-000221 | R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR144 | 2007-000221 | R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR145 | 2007-000241 | R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012 | |
| UR146 | 2007-000267 | R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012 | |
| UR148 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| UR149 | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| UR150 | 2007-001177 | R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR151 | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| UR152 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| UR153 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| UR154 | 2007-001201 | R-CHIP;820ohm,5%,1/10W,DA,TP,2012 | |
| UR155 | 2007-000221 | R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR156 | 2007-000221 | R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR157 | 2007-000241 | R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012 | |
| UR158 | 2007-000267 | R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012 | |
| UR159 | 2007-000518 | R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR160 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| UR161 | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| UR162 | 2007-001177 | R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR163 | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| UR164 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| UR165 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| UR166 | 2007-000572 | R-CHIP;220ohm,5%,1/10W,DA,TP,2012 | |
| UR167 | 2007-000572 | R-CHIP;220ohm,5%,1/10W,DA,TP,2012 | |
| UR168 | 2007-000572 | R-CHIP;220ohm,5%,1/10W,DA,TP,2012 | |
| UR17 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| UR170 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR172 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| UR181 | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| UR191 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR192 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR193 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR2 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR200 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR201 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR201 | 2007-001654 | R-CHIP;10Mohm,1%,1/10W,DA,TP,2012 | |
| UR209 | 2007-000565 | R-CHIP;220Kohm,5%,1/10W,DA,TP,2012 | |
| UR21 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR210 | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| UR22 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR23 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR24 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR25 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR26 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR27 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR28 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR29 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR3 | 2007-000493 | R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012 | |
| UR30 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR301 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| UR31 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| UR32 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR33 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR34 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR35 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR36 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR37 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR38 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR39 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR4 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| UR40 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR41 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR42 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR43 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR44 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR45 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR451 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR46 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR47 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR48 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR489 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR49 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR50 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR51 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR52 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR53 | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| UR6 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR7 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR72 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR73 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR74 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR75 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| UR76 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR77 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR78 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR8 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| UR80 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR81 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR90 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR91 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR93 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| UR95 | 2007-000401 | R-CHIP;150ohm,5%,1/10W,DA,TP,2012 | |
| UR96 | 2007-000401 | R-CHIP;150ohm,5%,1/10W,DA,TP,2012 | |

## AH93-30006H ASSY-FRONT,TAPG;MAX870,FRONT,AUTO SPA

| | | | |
|---|---|---|---|
| SW1 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW10 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW11 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW12 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW13 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW14 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW15 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW16 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW17 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW2 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW21 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW22 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW23 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW24 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW25 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW26 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW27 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW28 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW29 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW3 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW30 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW31 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW34 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW4 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW5 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW6 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW7 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW8 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| SW9 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF,6X6MM,S | |
| UC1 | 2201-000423 | C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2. | |
| UC102 | 2401-000244 | C-AL;100UF,20%,10V,GP,TP,6.3X7,2.5M | |
| UC11 | 2401-000650 | C-AL;2.2UF,20%,50V,GP,BK,3X5,1MM | |
| UC12 | 2201-000565 | C-CERAMIC,DISC;47nF,20%,50V,Y5V,12.5x4.0 | |
| UC13 | 2401-000244 | C-AL;100UF,20%,10V,GP,TP,6.3X7,2.5M | |
| UC14 | 2401-000244 | C-AL;100UF,20%,10V,GP,TP,6.3X7,2.5M | |
| UC15 | 2401-000909 | C-AL;22UF,20%,16V,GP,TP,5X5,2MM | |
| UC16 | 2401-001953 | C-AL;4.7UF,20%,50V,BP,BK,6.3X11MM,2 | |
| UC19 | 2409-000123 | C-EDL;47000UF,4UA,5.5V.-,BK,-,5MM | |
| UC2 | 2201-000423 | C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2. | |
| UC21 | 2202-000854 | C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP, | |
| UC22 | 2401-001953 | C-AL;4.7UF,20%,50V,BP,BK,6.3X11MM,2 | |
| UC27 | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| UC3 | 2201-000423 | C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2. | |
| UC4 | 2201-000423 | C-CERAMIC,DISC;27pF,5%,50V,NPO,TP,5x3,2. | |
| UC7 | 2401-000752 | C-AL;220NF,20%,50V,GP,BK,3X5,1MM | |
| UC9 | 2202-000854 | C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP, | |
| UD10 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD11 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD12 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD13 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD15 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD16 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD50 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD51 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| UD9 | 0402-000127 | DIODE-RECTIFIER;1N4002,100V,1A,DO-41 | |
| UIC6 | AC14-12001G | IC;KA78L05,T,- | |
| ULD1 | 0601-001051 | LED;ROUND,GRN/RED,3.2MM,563/650NM | |
| ULD10 | 0601-000245 | LED;ROUND,RED,3.1mm,650nm | |
| ULD11 | 0601-000245 | LED;ROUND,RED,3.1mm,650nm | |
| ULD12 | 0601-000245 | LED;ROUND,RED,3.1mm,650nm | |
| ULD18 | 0601-000141 | LED;ROUND,GRN,3.1MM,555NM | |
| ULD19 | 0601-000141 | LED;ROUND,GRN,3.1MM,555NM | |
| ULD2 | 0601-001051 | LED;ROUND,GRN/RED,3.2MM,563/650NM | |
| ULD20 | 0601-000141 | LED;ROUND,GRN,3.1MM,555NM | |
| ULD3 | 0601-001051 | LED;ROUND,GRN/RED,3.2MM,563/650NM | |
| ULD4 | 0601-001051 | LED;ROUND,GRN/RED,3.2MM,563/650NM | |
| ULD5 | 0601-000245 | LED;ROUND,RED,3.1mm,650nm | |
| ULD6 | 0601-000141 | LED;ROUND,GRN,3.1MM,555NM | |
| ULD7 | 0601-000141 | LED;ROUND,GRN,3.1MM,555NM | |
| ULD8 | 0601-000141 | LED;ROUND,GRN,3.1MM,555NM | |
| ULD9 | 0601-000245 | LED;ROUND,RED,3.1mm,650nm | |
| UQ1 | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| UQ10 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO- | |
| UQ11 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO- | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| UQ12 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO- | |
| UQ13 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO- | |
| UQ15 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ16 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ17 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ18 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ19 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ20 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ4 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ5 | 0504-000122 | TR-DIGITAL;KSR1009Y,NPN,300mW,4.7K,TO-92 | |
| UQ9 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO- | |
| UR10 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR100 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR101 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR102 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR103 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR104 | 2001-000508 | R-CARBON;220Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| UR105 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR107 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR108 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR109 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR11 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR110 | 2001-000515 | R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR111 | 2001-000857 | R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR112 | 2001-000857 | R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR113 | 2001-000857 | R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR113 | 2001-000857 | R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR114 | 2001-000857 | R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR115 | 2001-000038 | R-CARBON;390OHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| UR117 | 2001-000038 | R-CARBON;390OHM,5%,1/4W,AA,TP,2.4X6.4MM | |
| UR121 | 2001-000857 | R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR136 | 2001-000221 | R-CARBON;1.2Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| UR138 | 2001-000241 | R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| UR139 | 2001-000258 | R-CARBON;1.8Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| UR14 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| UR147 | 2001-000472 | R-CARBON;2.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| UR163 | 2001-000008 | R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR169 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR180 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR185 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR187 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR188 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR189 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR303 | 2001-000786 | R-CARBON;47Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR55 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR56 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR57 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR58 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR59 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR60 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR61 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR62 | 2001-000356 | R-CARBON;150Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| UR63 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR64 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR65 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR67 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR71 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR79 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR82 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR83 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR84 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR87 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR88 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR89 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR94 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| UR97 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |

### AH90-10739X ASSY-POWER PCB;MAX880,120V S.N.A
### AH93-10004Z ASSY-POWER,MANU;MAX870,POWER MANU EM1 S.N.A

| | | | |
|---|---|---|---|
| PC1 | 2201-000520 | C-CERAMIC,DISC;4.7NF,+80-20%,400VAC,Y5V, | |
| PC2 | 2201-000520 | C-CERAMIC,DISC;4.7NF,+80-20%,400VAC,Y5V, | |
| PJ1 | 3711-000190 | CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,STRA | |
| PL1 | AH27-10001F | COIL-CHOKE;27UH,K,Q30,-,-,DR(6.5*7.5),-, | |
| PL2 | AH27-10001F | COIL-CHOKE;27UH,K,Q30,-,-,DR(6.5*7.5),-, | |
| PW1 | 3711-003112 | CONNECTOR-HEADER;BOX,8P,1R,2.5MM,STRAIGH | |
| RF2 | 3601-000301 | FUSE-FERRULE;250V,6.3A,TIME LAG,GLASS,5X | |
| RF3 | 3601-000282 | FUSE-FERRULE;250V,4A,TIME LAG,GLASS,5X20 | |
| FUSE1 | 3602-000147 | FUSE-CLIP;250V,7.5A,30mohm | |
| RCW1 | 3711-000190 | CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,STRA | |
| RCW3 | 3708-001044 | CONNECTOR-FPC/FC/PIC;5P,1.5MM,STRAIGHT,S | |
| RF4 | 3601-000282 | FUSE-FERRULE;250V,4A,TIME LAG,GLASS,5X20 | |
| FUSE1 | 3602-000147 | FUSE-CLIP;250V,7.5A,30mohm | |
| RCW1 | 3711-000190 | CONNECTOR-HEADER;1WALL,2P,1R,7.92MM,STRA | |
| RCW3 | 3708-001044 | CONNECTOR-FPC/FC/PIC;5P,1.5MM,STRAIGHT,S | |

### AH93-30005E ASSY-POWER,TAPG;MAX870,POWER,AUTO EM1 S.N.A

| | | | |
|---|---|---|---|
| RF2 | 3602-000147 | FUSE-CLIP;250V,7.5A,30mohm | |
| RF3 | 3602-000147 | FUSE-CLIP;250V,7.5A,30mohm | |
| RF4 | 3602-000147 | FUSE-CLIP;250V,7.5A,30mohm | |

### AH90-10741W ASSY-DECK PCB;MAX850,FUL
### AH93-10003T ASSY-DECK,MANU;MAX850,DECK MANU FUL

| | | | |
|---|---|---|---|
| DCW6 | 3710-001272 | CONNECTOR-SOCKET;10P,1R,2.5mm,STRAIGHT-F | |
| DCW6-1 | 3711-003785 | CONNECTOR-HEADER;NOWALL,10P,1R,2.5mm,STR | |
| DCW7 | 3710-001272 | CONNECTOR-SOCKET;10P,1R,2.5mm,STRAIGHT-F | |
| DCW7-1 | 3711-003785 | CONNECTOR-HEADER;NOWALL,10P,1R,2.5mm,STR | |
| DCW8 | 3710-000544 | CONNECTOR-SOCKET;3P,1R,2.5MM,STRAIGHT,SN | |
| DCW8 | 3710-001248 | CONNECTOR-SOCKET;3P,1R,2.5mm,STRAIGHT,SN | |
| DCW9 | 3710-001270 | CONNECTOR-SOCKET;6P,1R,2.5mm,STRAIGHT-F, | |
| FJD2 | 3713-001128 | CONNECTOR-HOUSING;20P,2.54MM,FEMALE,2R | |
| JIC3 | 1204-001297 | IC-EQUALIZER;HA12203NT,DIP,42P,-,PLASTIC | |
| JIC6 | AH14-10006F | IC;TC9173P,DIP,EXPANDER 16P | |
| JIC7 | 1201-000357 | IC-PREAMP;3312,SIP,10P,-,-,55V/MV,PLASTI | |
| JL2L | AH26-10002X | COIL-TRAP;KS940830-05,BIAS-TRAP,30DB,7.6 | |
| JL2R | AH26-10002X | COIL-TRAP;KS940830-05,BIAS-TRAP,30DB,7.6 | |
| JL3 | AH26-10003C | COIL-TRAP;PCHNS-5371EQJ,BIAS-TRAP,-,-,85 | |
| JLPF1L | 2909-000210 | FILTER-LC;LP,-,1DB,TP,30DB/19KHZ,50DB/10 | |
| JLPF1R | 2909-000210 | FILTER-LC;LP,-,1DB,TP,30DB/19KHZ,50DB/10 | |
| TP1 | 3711-000907 | CONNECTOR-HEADER;BOX,3P,1R,2mm,STRAIGHT, | |
| TP2 | 3711-000907 | CONNECTOR-HEADER;BOX,3P,1R,2mm,STRAIGHT, | |
| TP3 | 3711-000907 | CONNECTOR-HEADER;BOX,3P,1R,2mm,STRAIGHT, | |

### AH93-20003S ASSY-DECK,CHIP;MAX850,DECK CHIP FUL

| | | | |
|---|---|---|---|
| JC10L | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC10R | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| JC11L | 2203-001036 | C-CERAMIC,CHIP;5.6nF,10%,50V,X7R,TP,2012 | |
| JC11R | 2203-001036 | C-CERAMIC,CHIP;5.6nF,10%,50V,X7R,TP,2012 | |
| JC15L | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| JC15R | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| JC17L | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| JC17R | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| JC19L | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| JC19R | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| JC1L | 2203-001058 | C-CERAMIC,CHIP;560pF,5%,50V,NPO,TP,2012, | |
| JC1R | 2203-001058 | C-CERAMIC,CHIP;560pF,5%,50V,NPO,TP,2012, | |
| JC22L | 2203-000727 | C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012 | |
| JC22R | 2203-000727 | C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012 | |
| JC24 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| JC2L | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC2R | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC30L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| JC30R | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| JC31L | 2203-000727 | C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012 | |
| JC31R | 2203-000727 | C-CERAMIC,CHIP;3.9NF,10%,50V,X7R,TP,2012 | |
| JC32L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| JC32R | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| JC39L | 2203-001550 | C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012 | |
| JC39R | 2203-001550 | C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012 | |
| JC3L | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC3R | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC42 | 2203-000417 | C-CERAMIC,CHIP;18NF,10%,50V,X7R,TP,2012, | |
| JC43 | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| JC46L | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| JC46R | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| JC48 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| JC4L | 2203-001105 | C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,TP,2012 | |
| JC4R | 2203-001105 | C-CERAMIC,CHIP;6.8NF,10%,50V,X7R,TP,2012 | |
| JC60L | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC60R | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC8L | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| JC8R | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| JC9L | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JC9R | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| JIC1 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M | |
| JIC2 | 1201-000163 | IC-OP AMP;4560,SOP,8P,150MIL,DUAL,100V/M | |
| JIC5 | AH14-10007D | IC;NJU3716M,SOP,STICK EXPANDER 16BIT | |
| JR10L | 2007-000565 | R-CHIP;220Kohm,5%,1/10W,DA,TP,2012 | |
| JR10R | 2007-000565 | R-CHIP;220Kohm,5%,1/10W,DA,TP,2012 | |
| JR11L | 2007-001024 | R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20 | |
| JR11R | 2007-001024 | R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20 | |
| JR12L | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| JR12R | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| JR13L | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| JR13R | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| JR14L | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| JR14R | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| JR17 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| JR1L | 2007-000565 | R-CHIP;220Kohm,5%,1/10W,DA,TP,2012 | |
| JR1R | 2007-000565 | R-CHIP;220Kohm,5%,1/10W,DA,TP,2012 | |
| JR22 | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| JR23 | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| JR24L | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| JR24R | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| JR25L | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| JR25R | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| JR27 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| JR2L | 2007-001024 | R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20 | |
| JR2R | 2007-001024 | R-CHIP-HARNESS;560Kohm,5%,1/10W,DA,TP,20 | |
| JR32L | 2007-000267 | R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012 | |
| JR32R | 2007-000267 | R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012 | |
| JR33L | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| JR34L | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| JR34R | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| JR35L | 2007-000518 | R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012 | |
| JR35R | 2007-000518 | R-CHIP;2.7Kohm,5%,1/10W,DA,TP,2012 | |
| JR36L | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| JR36R | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| JR37L | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| JR37R | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| JR38L | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| JR38R | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| JR39L | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| JR39R | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| JR3L | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| JR3R | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| JR40 | 2007-000498 | R-CHIP;2.2MOHM,5%,1/10W,DA,TP,2012 | |
| JR42L | 2007-001071 | R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012 | |
| JR42R | 2007-001071 | R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012 | |
| JR4L | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| JR4R | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| JR52 | 2007-000981 | R-CHIP;5.6Kohm,5%,1/10W,DA,TP,2012 | |
| JR53 | 2007-000221 | R-CHIP;1.2Kohm,5%,1/10W,DA,TP,2012 | |
| JR57 | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| JR62 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| JR63 | 2007-000710 | R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012 | |
| JR64L | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| JR70 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| JR8L | 2007-000308 | R-CHIP;10ohm,5%,1/10W,DA,TP,2012 | |
| SC1L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SC1R | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SC8L | 2203-001550 | C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012 | |
| SC8R | 2203-001550 | C-CERAMIC,CHIP;1.2NF,10%,50V,X7R,TP,2012 | |
| SR16L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR16R | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR17L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR17R | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR18L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR1L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR1R | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR2L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR2R | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| SR6L | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |

## AH93-30004M ASSY-DECK,TAPG;MAX850,DECK,AUTO FUL

| | | | |
|---|---|---|---|
| JC12L | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| JC12R | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| JC13L | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC13R | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC14 | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| JC16L | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| JC16R | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| JC18L | 2401-001968 | C-AL;470NF,20%,50V,GP,TP,5X11MM,5 | |
| JC18R | 2401-001968 | C-AL;470NF,20%,50V,GP,TP,5X11MM,5 | |
| JC20L | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| JC20R | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| JC21L | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| JC21R | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| JC23L | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC23R | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC25 | 2401-001080 | C-AL;330NF,20%,50V,GP,-,5X11,2MM | |
| JC26 | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC27 | 2401-000907 | C-AL;22UF,20%,16V,GP,-,5X11,2MM | |
| JC28 | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC33L | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC33R | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC34L | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC34R | 2401-001465 | C-AL;47UF,20%,10V,GP,-,5X11,2MM | |
| JC35L | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC35R | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC36 | 2401-001465 | C-AL;47UF,20%,10V,GP,-,5X11,2MM | |
| JC37 | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC38 | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC40 | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| JC41 | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC44 | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| JC45 | 2301-000404 | C-FILM,PEF;2.2NF,10%,50V,TP,5.5X7X3.2MM, | |
| JC45L | 2201-000368 | C-CERAMIC,DISC;220pF,10%,50V,SL,TP,6.5x3 | |
| JC45R | 2201-000368 | C-CERAMIC,DISC;220pF,10%,50V,SL,TP,6.5x3 | |
| JC47 | 2401-000907 | C-AL;22UF,20%,16V,GP,-,5X11,2MM | |
| JC48L | 2401-001968 | C-AL;470NF,20%,50V,GP,TP,5X11MM,5 | |
| JC48R | 2401-001968 | C-AL;470NF,20%,50V,GP,TP,5X11MM,5 | |
| JC49 | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| JC50 | 2401-002180 | C-AL;2.2UF,20%,50V,GP,TP,5X11,5MM | |
| JC5L | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| JC5R | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| JC6L | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC6R | 2401-001975 | C-AL;47UF,20%,16V,GP,TP,5X11MM,5 | |
| JC7L | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | |
| JC7R | 2202-000796 | C-CERAMIC,MLC-AXIAL;1nF,10%,50V,Y5P,TP,3 | |
| JD1 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| JD2 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| JD3 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| JD4 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| JD5 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mW, | |
| JL4 | 2701-000177 | INDUCTOR-AXIAL;33UH,10%,2.5X3.4MM | |
| JQ10 | 0504-001003 | TR-DIGITAL;KSR2003,PNP,300MW,22K-22K,TO- | |
| JQ11 | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JQ12 | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| JQ13 | 0501-000610 | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L, | |
| JQ14 | 0501-000610 | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L, | |
| JQ15 | 0501-000610 | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L, | |
| JQ16 | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JQ19 | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JQ1L | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| JQ1R | 0501-000398 | TR-SMALL SIGNAL;KSC945,NPN,250mW,TO-92,T | |
| JQ20 | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JQ3L | 0501-000010 | TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m | |
| JQ3R | 0501-000010 | TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m | |
| JQ4 | 0501-000294 | TR-SMALL SIGNAL;KSA708-Y,PNP,800mW,TO-92 | |
| JQ4L | 0501-000010 | TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m | |
| JQ4R | 0501-000010 | TR-SMALL SIGNAL;KSC1008,NPN,80V,60V,700m | |
| JQ5 | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JQ6 | 0501-000369 | TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L, | |
| JQ7 | 0501-000369 | TR-SMALL SIGNAL;KSC2331-Y,NPN,1W,TO-92L, | |
| JQ8 | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JQ9L | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JQ9R | 0504-000118 | TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO- | |
| JR16 | 2001-000281 | R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR18 | 2001-000281 | R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR18L | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR18R | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR19L | 2001-000449 | R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR19R | 2001-000449 | R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR20 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR21L | 2001-000890 | R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| JR21R | 2001-000890 | R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| JR26 | 2001-000362 | R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR31L | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR31R | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR33R | 2001-000591 | R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR41 | 2001-000281 | R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR43 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR44 | 2001-001107 | R-CARBON(S);220ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| JR51 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR54 | 2001-001178 | R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| JR55 | 2001-001178 | R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| JR56 | 2001-000290 | R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR58 | 2001-000563 | R-CARBON;27Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR5L | 2001-000008 | R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR5R | 2001-000008 | R-CARBON;15Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR6 | 2001-000281 | R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR60 | 2001-001178 | R-CARBON(S);680ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| JR64R | 2001-000591 | R-CARBON;3.3Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR65 | 2001-000977 | R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M | |
| JR67 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR69 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR7 | 2001-000281 | R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR71 | 2001-000456 | R-CARBON;2.2ohm,5%,1/4W,AA,TP,2.4x6.4mm | |
| JR72 | 2001-000005 | R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| JR73 | 2001-000005 | R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3.2MM | |
| JR8R | 2001-000281 | R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| JR9L | 2001-000449 | R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JR9R | 2001-000449 | R-CARBON;2.2Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| JSR1L | 2103-000171 | VR-SEMI;10KOHM,30%,1/10W,TOP | |
| JSR1R | 2103-000171 | VR-SEMI;10KOHM,30%,1/10W,TOP | |
| JSR2L | 2103-000171 | VR-SEMI;10KOHM,30%,1/10W,TOP | |
| JSR2R | 2103-000171 | VR-SEMI;10KOHM,30%,1/10W,TOP | |
| JSR3L | 2103-000171 | VR-SEMI;10KOHM,30%,1/10W,TOP | |
| JSR3R | 2103-000171 | VR-SEMI;10KOHM,30%,1/10W,TOP | |
| JSR4L | 2103-000248 | VR-SEMI;200KOHM,30%,1/10W,TOP | |
| JSR4R | 2103-000248 | VR-SEMI;200KOHM,30%,1/10W,TOP | |
| JSR5 | 2103-000341 | VR-SEMI;2KOHM,30%,1/10W,TOP | |
| JSR6 | 2103-000341 | VR-SEMI;2KOHM,30%,1/10W,TOP | |
| JZD1 | 0403-000562 | DIODE-ZENER;MTZ7.5B,7.5V,7.07-7.45V,500m | |
| JZD2 | 0403-000562 | DIODE-ZENER;MTZ7.5B,7.5V,7.07-7.45V,500m | |
| JZD3 | 0403-000355 | DIODE-ZENER;UZ5.1BSB,5.1V,4.97-5.18V,50 | |
| | | **AH90-10719E ASSY-PCB;G3A8-3VI/C,NEW** | |
| | | **AH94-10025M ASSY-PCB,MANU;G3A8-3VI/C,NEW** | |
| | 3708-001131 | CONNECTOR-FPC/FC/PIC;5P,1.25MM,STRAIGHT, | |
| | 3711-003379 | CONNECTOR-HEADER;NOWALL,3P,1R,2.5MM,STRA | |
| SCW1 | 3711-002579 | CONNECTOR-HEADER;WALL,22P,1R,2.5MM,ANGLE | |
| SCW2 | 3708-000507 | CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE,SN | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| SCW3 | AH39-20025T | LEAD-CONNECTOR,ASSY;-,51004-08,35023-08, | |
| SCW4 | AH39-20025S | LEAD-CONNECTOR,ASSY;-,51004-08,35023-08, | |

**AH94-30025M ASSY-PCB,AUTO;G3A8-3VI/C,NEW**

**AH41-10265C PCB-CD SUB;CD SUB,1L,FR-1,197X197X1.6T**

| | | | |
|---|---|---|---|
| SC1 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC11 | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| SC2 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC3 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC4 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC5 | 2201-000163 | C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6 | |
| SC6 | 2201-000163 | C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6 | |
| SC7 | 2201-000163 | C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6 | |
| SC8 | 2401-000795 | C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M | |
| SC9 | 2401-000795 | C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M | |
| SIC1 | 1003-000298 | IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST, | |
| SIC2 | 1003-000298 | IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST, | |
| SIC3 | AC14-12001G | IC;KA78L05,T,- | |
| SL1 | 2701-000179 | INDUCTOR-AXIAL;33UH,10%,4.2X9.8MM | |
| SR1 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| SR2 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| SR3 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| SR4 | 2001-000028 | R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| SR5 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| SZD1 | 0403-000352 | DIODE-ZENER;UZ4.7BM,4.7V,4.4-5.0V,500MW, | |
| SZD2 | 0403-000361 | DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24V,50 | |

**AH90-10737E ASSY-CD MAIN PCB;G3X8,NON ADJUST**

**AH93-10001Q ASSY-CD MAIN,MANU;G3X8,NON ADJUST**

| | | | |
|---|---|---|---|
| | 3409-000174 | SWITCH-LEAF;16VDC,500MA,10GF,SPST | |
| | 3708-000177 | CONNECTOR-FPC/FC/PIC;16P,1MM,ANGLE,SN | |
| | 3708-000412 | CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE, | |
| | 3711-001136 | CONNECTOR-HEADER;BOX,8P,1R,2mm,ANGLE,SN | |
| | 3809-000202 | CABLE-FLAT;30V,80C,82MM,16P,1MM,UL2896 | |
| | AH62-30047A | HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555,- | |
| NXF100 | 2802-000211 | RESONATOR-CERAMIC;16.93MHZ,0.5%,TP,10.0X | |

**AH93-20001P ASSY-CD MAIN,CHIP;G3X8,NON ADJUST**

| | | | |
|---|---|---|---|
| IC9223 | 1204-001286 | IC-ASP;KB9223,QFP,80P,-,PLASTIC,6V,20 | |
| IC9258 | 1003-000179 | IC-MOTOR DRIVER;KA9258D,SOP,28P,-,SINGLE | |
| IC9286 | 0904-001159 | IC-DSP;9286,8BIT,QFP,80P,-,1MHZ,TR,CM | |
| NC100 | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| NC101 | 2203-000802 | C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012, | |
| NC102 | 2203-001551 | C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m | |
| NC103 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC104 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC106 | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| NC107 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC108 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC110 | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| NC111 | 2203-000802 | C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012, | |
| NC112 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC113 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC115 | 2203-001137 | C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V,TP,2 | |
| NC116 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC118 | 2203-000787 | C-CERAMIC,CHIP;330pF,5%,50V,NPO,TP,2012, | |
| NC119 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC120 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC121 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC124 | 2203-000919 | C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP, | |
| NC125 | 2203-000802 | C-CERAMIC,CHIP;33nF,10%,50V,X7R,TP,2012, | |
| NC190 | 2203-001256 | C-CERAMIC,CHIP;8pF,0.25pF,50V,NPO,TP,201 | |
| NC200 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| NC2000 | 2203-001026 | C-CERAMIC,CHIP;4PF,0.25PF,50V,SL,TP,2012 | |
| NC201 | 2203-001551 | C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m | |
| NC202 | 2203-001619 | C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2 | |
| NC203 | 2203-001619 | C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2 | |
| NC204 | 2203-000919 | C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP, | |
| NC205 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC300 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC301 | 2203-000477 | C-CERAMIC,CHIP;1uF,+80-20%,16V,Y5V,TP,20 | |
| NC400 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC500 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC502 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC50L | 2404-000367 | C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,- | |
| NC50R | 2404-000367 | C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,- | |
| NC52L | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC52R | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC53L | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC53R | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC54L | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| NC54R | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| NC602 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC603 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC800 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC804 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC901 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC902 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC903 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC904 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC905 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| ND200 | 0407-000101 | DIODE-ARRAY;DA204K,20V,100MA,C2-3,SOT-23 | |
| ND201 | 0407-000101 | DIODE-ARRAY;DA204K,20V,100MA,C2-3,SOT-23 | |
| NJR102 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR103 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR104 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR105 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR105 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR106 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR107 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR108 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR110 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR111 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR112 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR113 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR114 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR115 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR116 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR117 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR118 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR127 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR129 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR131 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR132 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR133 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR134 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR135 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR136 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR137 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| NJR138 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR139 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR140 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR141 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR142 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR143 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR144 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR145 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR146 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR147 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR148 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR149 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR150 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR151 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR152 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR153 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR154 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR155 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR156 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR300 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR301 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR302 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR303 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR304 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR305 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR306 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR307 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR308 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJW320 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NL100 | 2703-000001 | INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm | |
| NL300 | 3301-000325 | CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,- | |
| NL301 | 2703-000001 | INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm | |
| NL302 | 3301-000325 | CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,- | |
| NL303 | 2703-000001 | INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm | |
| NQ1502 | 0501-000314 | TR-SMALL SIGNAL;KSA812,PNP,150MW,SOT-23, | |
| NR100 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR101 | 2007-000593 | R-CHIP;22ohm,5%,1/10W,DA,TP,2012 | |
| NR102 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR103 | 2007-000395 | R-CHIP;150Kohm,5%,1/10W,DA,TP,2012 | |
| NR104 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| NR105 | 2007-000830 | R-CHIP;39Kohm,5%,1/10W,DA,TP,2012 | |
| NR106 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| NR107 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| NR108 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| NR109 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR111 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| NR112 | 2007-001039 | R-CHIP;56Kohm,5%,1/10W,DA,TP,2012 | |
| NR113 | 2007-001177 | R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012 | |
| NR114 | 2007-000477 | R-CHIP;1Mohm,5%,1/10W,DA,TP,2012 | |
| NR115 | 2007-000444 | R-CHIP;180KOHM,5%,1/10W,DA,TP,2012 | |
| NR116 | 2007-001195 | R-CHIP;820Kohm,5%,1/10W,DA,TP,2012 | |
| NR117 | 2007-000898 | R-CHIP;430KOHM,5%,1/10W,DA,TP,2012 | |
| NR118 | 2007-001213 | R-CHIP;82ohm,1%,1/10W,DA,TP,2012 | |
| NR119 | 2007-000395 | R-CHIP;150Kohm,5%,1/10W,DA,TP,2012 | |
| NR120 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR121 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR200 | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| NR201 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| NR202 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| NR203 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR204 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR300 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR400 | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| NR401 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR500 | 2007-000395 | R-CHIP;150Kohm,5%,1/10W,DA,TP,2012 | |
| NR50L | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| NR50R | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| NR52L | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| NR52R | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| NR53L | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR53R | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR54L | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR54R | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR55L | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR55R | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR56L | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| NR56R | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| NR57L | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR57R | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR601 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR602 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| NR603 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| NR604 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR606 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR804 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |

## AH93-30001X ASSY-CD MAIN,AUTO;G3X8,NON ADJUST

| | | | |
|---|---|---|---|
| NC105 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC114 | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| NC117 | 2301-000389 | C-FILM,PEF;150NF,5%,50V,TP,12.5X15X7.5,7 | |
| NC122 | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |
| NC501 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC55L | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |
| NC55R | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |
| NC700 | 2401-000868 | C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM | |
| NC701 | 2401-000868 | C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM | |
| NC702 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC703 | 2401-001364 | C-AL;470UF,20%,16V,GP,TP,10X12MM,5M | |
| NC704 | 2401-000778 | C-AL;220UF,20%,10V,GP,-,6.3X11,2.5M | |
| NC902 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC903 | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |
| NIC05 | AC14-12001G | IC;KA78L05,T,- | |
| NQ1501 | 0501-000610 | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L, | |
| NR555 | 2008-000141 | R-FUSIBLE;2.2OHM,5%,1/4W,AA,TP,2.6X6.7MM | |

# OPTION

## * MAX850/860/870/880 OUTPUT POWER OPTION LIST

**- MAX850 SERIES - MAX850 ; 60W**
**- MAX870 SERIES - MAX870,MAX860 ; 80W**
**- MAX880 SERIES - MAX880 ; 120W**

### * Power-IC Option List

| PCB Ass'y | Location no. | Code no. | Description & Specification | Model | IC Name |
|---|---|---|---|---|---|
| Main PCB Ass'y | AIC1 | 1201-001244 | IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB | MAX-850 | STK417-090 |
| | AIC1 | 1201-001218 | IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB | MAX-880 | STK417-130 |
| | AIC1 | 1201-001213 | IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB | MAX-860 MAX-870 | STK417-100 |

### * Power Source Parts List

| PCB Ass'y | Location no. | Code no. | Description & Specification | Model |
|---|---|---|---|---|
| Main PCB Ass'y | AC4,5 | 2401-001902 | C-AL;100UF,20%,50V,GP,-,6.3X11,2.5 | MAX850 |
| | | 2401-000375 | C-AL;100UF,20%,100V,GP,-,10X20.5 | MAX880/870/860 |
| | AC6,9 | 2401-000475 | C-AL;10UF,20%,50V,GP,-,5X11,2.5 | MAX850 |
| | | 2401-000385 | C-AL;10UF,20%,100V,GP,-,5X11,2.5 | MAX880/870/860 |
| | RC7,8 | 2401-001943 | C-AL;3300UF,20%,50V,GP,-,25X40MM | MAX850 |
| | | 2401-003266 | C-AL; 4700UF,20%,63V,GP,-,30X30 | MAX870/860 |
| | | 2401-003267 | C-AL; 4700UF,20%,80V,GP,-,30X30 | MAX880 |
| | RBD1,2 | 0402-000450 | DIODE-BRIDGE ; PBL403,200V,4.0A | MAX850 |
| | | 0402-001010 | DIODE-BRIDGE ; GBU6D,200V,6A | MAX880/870/860 |
| | AZD1,2 | 0403-000004 | DIODE-ZENER ; UZ12BM,12V,11.6-12.4 V,500MW | MAX850 MAX880/870/860 |
| | | 0403-000363 | DIODE-ZENER ; UZD6.8BM,6.8V,0.5W | |
| | RBD12 | AH62-30127A | HEAT-SINK-TR ; -,AL,-,T2,0,-,WHT,- | MAX880/870/860 |

### *The Others Parts List

| PCB Ass'y | Location no. | Code no. | Description & Specification | MAX850 | MAX870 /860/880 |
|---|---|---|---|---|---|
| Main PCB Ass'y | AR8L,R | | 10 ohm 1W | O | X |
| | | 2003-000471 | 20 ohm 2W | X | O |
| | AR16L | 2001-000591 | R-CARBON ; 3.3Kohm 5% 1/8W,AA TP,1.8*3.2mm | X | O |
| | AR16R | 2007-000686 | R-CHIP ; 3.3Kohm 5% 1/10W, DA,TP,2012 | X | O |
| | AQ8L,R | 0501-000407 | TR-SMALL SIGNAL; KSD471AY,NPN,800MW | X | O |
| | AIC1S | 6003-000276 | SCREW ; 3*12 YEL | 8EA | 10EA |
| | AIC1S2 | A0102-0011 | SCREW ; 3*14 YEL | 2EA | 2EA |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|

# - Option -

## AH96-10001C ASS'Y-CD PACK; G3X8C,G3X8+UD SP

| | | | |
|---|---|---|---|
| | 3809-001034 | CABLE-FLAT;30V,80C,170mm,22P,1.25mm,UL28 | |
| | AH59-20004Y | DECK-CDP;CMS-P30AM6UD,-,-,-,- | |
| | AH59-20004Z | DECK-3CD CHANGER;CMS300UD,-,-,-,- | |

## AH90-10719E ASSY-PCB;G3A8-3VI/C,NEW

## AH94-10025M ASSY-PCB,MANU;G3A8-3VI/C,NEW

| | | | |
|---|---|---|---|
| | 3708-001131 | CONNECTOR-FPC/FC/PIC;5P,1.25mm,STRAIGHT, | |
| | 3711-003379 | CONNECTOR-HEADER;NOWALL,3P,1R,2.5mm,STRA | |
| SCW1 | 3711-002579 | CONNECTOR-HEADER;WALL,22P,1R,2.5MM,ANGLE | |
| SCW2 | 3708-000507 | CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE,SN | |
| SCW3 | AH39-20025T | LEAD-CONNECTOR,ASSY;-,51004-08,35023-08, | |
| SCW4 | AH39-20025S | LEAD-CONNECTOR,ASSY;-,51004-08,35023-08, | |

## AH94-30025M ASSY-PCB,AUTO;G3A8-3VI/C,NEW

## AH41-10265C PCB-CD SUB;CD SUB,1L,FR-1,197X197X1.6T

| | | | |
|---|---|---|---|
| SC1 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC11 | 2401-000240 | C-AL;100UF,20%,10V,GP,TP,6X11MM,5MM | |
| SC2 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC3 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC4 | 2202-000797 | C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP, | |
| SC5 | 2201-000163 | C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6 | |
| SC6 | 2201-000163 | C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6 | |
| SC7 | 2201-000163 | C-CERAMIC,DISC;10nF,+80-20%,50V,Y5V,TP,6 | |
| SC8 | 2401-000795 | C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M | |
| SC9 | 2401-000795 | C-AL;220UF,20%,16V,GP,-,8X11.5,3.5M | |
| SIC1 | 1003-000298 | IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST, | |
| SIC2 | 1003-000298 | IC-MOTOR DRIVER;LB1641,SIP,10P,-,-,-,ST, | |
| SIC3 | AC14-12001G | IC;KA78L05,T,- | |
| SJW1 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SJW2 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SJW3 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SJW4 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SJW5 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SJW6 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SJW7 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SJW8 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| SL1 | 2701-000179 | INDUCTOR-AXIAL;33uH,10%,4.2x9.8mm | |
| SR1 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| SR2 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| SR3 | 2001-000734 | R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2m | |
| SR4 | 2001-000028 | R-CARBON(S);100ohm,5%,1/2W,AA,TP,2.4x6.4 | |
| SR5 | 2001-000429 | R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm | |
| SZD1 | 0403-000352 | DIODE-ZENER;UZ4.7BM,4.7V,4.4-5.0V,500mW, | |
| SZD2 | 0403-000361 | DIODE-ZENER;UZ6.2BSB,6.2V,5.99-6.24V,500 | |

## AH90-10737E ASSY-CD MAIN PCB;G3X8,NON ADJUST

## AH93-10001Q ASSY-CD MAIN,MANU;G3X8,NON ADJUST

| | | | |
|---|---|---|---|
| | 3409-000174 | SWITCH-LEAF;16Vdc,500mA,10gf,SPST | |
| | 3708-000177 | CONNECTOR-FPC/FC/PIC;16P,1MM,ANGLE,SN | |
| | 3708-000412 | CONNECTOR-FPC/FC/PIC;12P,1.25MM,ANGLE, | |
| | 3711-001136 | CONNECTOR-HEADER;BOX,8P,1R,2mm,ANGLE,SN | |
| | 3809-000202 | CABLE-FLAT;30V,80C,82MM,16P,1MM,UL2896 | |
| | AH61-22002A | HOLDER-PCB;-,NYLON 66,-,-,OD3.4,DVC-650S | |
| | AH62-30047A | HEAT SINK;ETHD,-,T0.5,-,-,-,MAX-555,- | |
| NXF100 | 2802-000211 | RESONATOR-CERAMIC;16.93MHz,0.5%,TP,10.0x | |

## AH93-20001P ASSY-CD MAIN,CHIP;G3X8,NON ADJUST

| | | | |
|---|---|---|---|
| IC9223 | 1204-001286 | IC-ASP;KB9223,QFP,80P,-,PLASTIC,6V,20 | |
| IC9258 | 1003-000179 | IC-MOTOR DRIVER;KA9258D,SOP,28P,-,SINGLE | |
| IC9286 | 0904-001159 | IC-DSP;9286,8BIT,QFP,80P,-,1MHz,TR,CM | |
| NC100 | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| NC101 | 2203-000802 | C-CERAMIC,CHIP:33nF,10%,50V,X7R,TP,2012, | |
| NC102 | 2203-001551 | C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m | |
| NC103 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC104 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC106 | 2203-000892 | C-CERAMIC,CHIP;4.7nF,10%,50V,X7R,TP,2012 | |
| NC107 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC108 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC110 | 2203-000495 | C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,2012 | |
| NC111 | 2203-000802 | C-CERAMIC,CHIP:33nF,10%,50V,X7R,TP,2012, | |
| NC112 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC113 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC115 | 2203-001137 | C-CERAMIC,CHIP;68NF,+80-20%,50V,Y5V,TP,2 | |
| NC116 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC118 | 2203-000787 | C-CERAMIC,CHIP;330pF,5%,50V,NPO,TP,2012, | |
| NC119 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC120 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC121 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC124 | 2203-000919 | C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP, | |
| NC125 | 2203-000802 | C-CERAMIC,CHIP:33nF,10%,50V,X7R,TP,2012, | |
| NC190 | 2203-001256 | C-CERAMIC,CHIP;8pF,0.25pF,50V,NPO,TP,201 | |
| NC200 | 2203-000979 | C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012, | |
| NC2000 | 2203-001026 | C-CERAMIC,CHIP;4PF,0.25PF,50V,SL,TP,2012 | |
| NC201 | 2203-001551 | C-CERAMIC,CHIP;1.5nF,10%,50V,X7R,2012,2m | |
| NC202 | 2203-001619 | C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2 | |
| NC203 | 2203-001619 | C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,2 | |
| NC204 | 2203-000919 | C-CERAMIC,CHIP;470nF,+80-20%,16V,Y5V,TP, | |
| NC205 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC300 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC301 | 2203-000477 | C-CERAMIC,CHIP;1uF,+80-20%,16V,Y5V,TP,20 | |
| NC400 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC500 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC502 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC50L | 2404-000367 | C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,- | |
| NC50R | 2404-000367 | C-TA,CHIP;4.7UF,20%,6.3V,-,TP,3216,- | |
| NC52L | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC52R | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC53L | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC53R | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC54L | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| NC54R | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012, | |
| NC602 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC603 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC800 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC804 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC901 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC902 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| NC903 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,- | |
| NC904 | 2203-000199 | C-CERAMIC,CHIP;100nF,+80-20%,50V,Z5U,TP, | |
| NC905 | 2203-000260 | C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012, | |
| ND200 | 0407-000101 | DIODE-ARRAY;DA204K,20V,100mA,C2-3,SOT-2 | |
| ND201 | 0407-000101 | DIODE-ARRAY;DA204K,20V,100mA,C2-3,SOT-2 | |
| NJR102 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| NJR103 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR104 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR105 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR105 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR106 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR107 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR108 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR110 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR111 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR112 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR113 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR114 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR115 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR116 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR117 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR118 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR127 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR129 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR131 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR132 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR133 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR134 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR135 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR136 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR137 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR138 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR139 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR140 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR141 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR142 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR143 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR144 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR145 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR146 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR147 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR148 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR149 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR150 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR151 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR152 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR153 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR154 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR155 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR156 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR300 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR301 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR302 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR303 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR304 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR305 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NJR306 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR307 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJR308 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NJW320 | 2007-000029 | R-CHIP;0ohm,5%,1/10W,DA,TP,2012 | |
| NL100 | 2007-000033 | R-CHIP;0ohm,5%,1/8W,DA,TP,3216 | |
| NL300 | 3301-000325 | CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,- | |
| NL301 | 2703-000001 | INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm | |
| NL302 | 3301-000325 | CORE-FERRITE BEAD;AB,3.2X2.5X1.3MM,-,- | |
| NL303 | 2703-000001 | INDUCTOR-SMD;10uH,10%,2.5x3.2x2mm | |
| NQ1502 | 0501-000314 | TR-SMALL SIGNAL;KSA812,PNP,150MW,SOT-23, | |
| NR100 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR101 | 2007-000593 | R-CHIP;22ohm,5%,1/10W,DA,TP,2012 | |
| NR102 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR103 | 2007-000395 | R-CHIP;150Kohm,5%,1/10W,DA,TP,2012 | |
| NR104 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| NR105 | 2007-000830 | R-CHIP;39Kohm,5%,1/10W,DA,TP,2012 | |
| NR106 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| NR107 | 2007-000338 | R-CHIP;120Kohm,5%,1/10W,DA,TP,2012 | |
| NR108 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| NR109 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR111 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | |
| NR112 | 2007-001039 | R-CHIP;56Kohm,5%,1/10W,DA,TP,2012 | |
| NR113 | 2007-001177 | R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012 | |
| NR114 | 2007-000477 | R-CHIP;1Mohm,5%,1/10W,DA,TP,2012 | |
| NR115 | 2007-000444 | R-CHIP;180KOHM,5%,1/10W,DA,TP,2012 | |
| NR116 | 2007-001195 | R-CHIP;820Kohm,5%,1/10W,DA,TP,2012 | |
| NR117 | 2007-000898 | R-CHIP;430Kohm,5%,1/10W,DA,TP,2012 | |
| NR118 | 2007-001213 | R-CHIP;82ohm,1%,1/10W,DA,TP,2012 | |
| NR119 | 2007-000395 | R-CHIP;150Kohm,5%,1/10W,DA,TP,2012 | |
| NR120 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR121 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR200 | 2007-000653 | R-CHIP;27Kohm,5%,1/10W,DA,TP,2012 | |
| NR201 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| NR202 | 2007-000686 | R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012 | |
| NR203 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR204 | 2007-000355 | R-CHIP;12Kohm,5%,1/10W,DA,TP,2012 | |
| NR300 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR400 | 2007-000409 | R-CHIP;15Kohm,5%,1/10W,DA,TP,2012 | |
| NR401 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR500 | 2007-000395 | R-CHIP;150Kohm,5%,1/10W,DA,TP,2012 | |
| NR50L | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| NR50R | 2007-000586 | R-CHIP;22Kohm,5%,1/10W,DA,TP,2012 | |
| NR52L | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| NR52R | 2007-000774 | R-CHIP;33Kohm,5%,1/10W,DA,TP,2012 | |
| NR53L | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR53R | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR54L | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR54R | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR55L | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR55R | 2007-000872 | R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012 | |
| NR56L | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| NR56R | 2007-000290 | R-CHIP;100ohm,5%,1/10W,DA,TP,2012 | |
| NR57L | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR57R | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR601 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR602 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| NR603 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | |
| NR604 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |
| NR606 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | |
| NR804 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | |

## AH93-30001X ASSY-CD MAIN,AUTO;G3X8,NON ADJUST

| | | | |
|---|---|---|---|
| NC105 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC114 | 2401-000419 | C-AL;10UF,20%,16V,GP,-,4X7,5 | |
| NC117 | 2301-000389 | C-FILM,PEF;150nF,5%,50V,12.5x15x7.5,7mm, | |
| NC122 | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |
| NC501 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC55L | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |

| Location no. | Code no. | Description & Specifiation | Remarks |
|---|---|---|---|
| NC55R | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |
| NC700 | 2401-000868 | C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM | |
| NC701 | 2401-000868 | C-AL;220UF,20%,4V,GP,TP,6.3X5,2.5MM | |
| NC702 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC703 | 2401-001364 | C-AL;470UF,20%,16V,GP,TP,10X12MM,5M | |
| NC704 | 2401-000778 | C-AL;220uF,20%,10V,GP,-,6.3x11,2.5m | |
| NC902 | 2401-000243 | C-AL;100UF,20%,10V,GP,TP,6.3X5,2.5M | |
| NC903 | 2401-001238 | C-AL;4.7UF,20%,25V,GP,BK,3X5,1MM | |
| NIC05 | AC14-12001G | IC;KA78L05,T,- | |
| NJW101 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW102 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW103 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW104 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW105 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW106 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW107 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW107 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW108 | 3301-000297 | CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400, | |
| NJW109 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW110 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW111 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW112 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW113 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NJW114 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4mm,1/0.5 | |
| NQ1501 | 0501-000610 | TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L, | |
| NR555 | 2008-000141 | R-FUSIBLE;2.2ohm,5%,1/4W,AA,TP,2.6x6.7mm | |

# OPTION

## * MAX850/860/870/880 OUTPUT POWER OPTION LIST

**- MAX850 SERIES - MAX850 ; 60W**
**- MAX870 SERIES - MAX870,MAX860 ; 80W**
**- MAX880 SERIES - MAX880 ; 120W**

### * Power-IC Option List

| PCB Ass'y | Location no. | Code no. | Description & Specification | Model | IC Name |
|---|---|---|---|---|---|
| Main PCB Ass'y | AIC1 | 1201-001244 | IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB | MAX-850 | STK417-090 |
| | AIC1 | 1201-001218 | IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB | MAX-880 | STK417-130 |
| | AIC1 | 1201-001213 | IC-POWER AMP ; 417,SIP,22P,-, SIGLE 40dB | MAX-860 MAX-870 | STK417-100 |

### * Power Source Parts List

| PCB Ass'y | Location no. | Code no. | Description & Specification | Model |
|---|---|---|---|---|
| Main PCB Ass'y | AC4,5 | 2401-001902 | C-AL;100UF,20%,50V,GP,-,6.3X11,2.5 | MAX850 |
| | | 2401-000375 | C-AL;100UF,20%,100V,GP,-,10X20.5 | MAX880/870/860 |
| | AC6,9 | 2401-000475 | C-AL;10UF,20%,50V,GP,-,5X11,2.5 | MAX850 |
| | | 2401-000385 | C-AL;10UF,20%,100V,GP,-,5X11,2.5 | MAX880/870/860 |
| | RC7,8 | 2401-001943 | C-AL;3300UF,20%,50V,GP,-,25X40MM | MAX850 |
| | | 2401-003266 | C-AL; 4700UF,20%,63V,GP,-,30X30 | MAX870/860 |
| | | 2401-003267 | C-AL; 4700UF,20%,80V,GP,-,30X30 | MAX880 |
| | RBD1,2 | 0402-000450 | DIODE-BRIDGE ; PBL403,200V,4.0A | MAX850 |
| | | 0402-001010 | DIODE-BRIDGE ; GBU6D,200V,6A | MAX880/870/860 |
| | AZD1,2 | 0403-000004 | DIODE-ZENER ; UZ12BM,12V,11.6-12.4 V,500MW | MAX850 MAX880/870/860 |
| | | 0403-000363 | DIODE-ZENER ; UZD6.8BM,6.8V,0.5W | |
| | RBD12 | AH62-30127A | HEAT-SINK-TR ; -,AL,-,T2,0,-,WHT,- | MAX880/870/860 |

### *The Others Parts List

| PCB Ass'y | Location no. | Code no. | Description & Specification | MAX850 | MAX870 /860/880 |
|---|---|---|---|---|---|
| Main PCB Ass'y | AR8L,R | | 10 ohm 1W | O | X |
| | | 2003-000471 | 20 ohm 2W | X | O |
| | AR16L | 2001-000591 | R-CARBON ; 3.3Kohm 5% 1/8W,AA TP,1.8*3.2mm | X | O |
| | AR16R | 2007-000686 | R-CHIP ; 3.3Kohm 5% 1/10W, DA,TP,2012 | X | O |
| | AQ8L,R | 0501-000407 | TR-SMALL SIGNAL; KSD471AY,NPN,800MW | X | O |
| | AIC1S | 6003-000276 | SCREW ; 3*12 YEL | 8EA | 10EA |
| | AIC1S2 | A0102-0011 | SCREW ; 3*14 YEL | 2EA | 2EA |

## * Power PCB Parts Option List

| PCB Ass'y | Location no. | Code no. | Description & Specification | MAX870 | | |
|---|---|---|---|---|---|---|
| | | | | DUAL | 230V | 115V |
| Power PCB Ass'y | RF1 | 3601-000248 | FUSE-FERRULE ; 250V,2A,TIME LAG, GLASS, 5*20 | O | X | X |
| | RF2 | 3601-000248 | FUSE-FERRULE ; 250V,2A,TIME LAG, GLASS, 5*20 | O | O | X |
| | | 3601-000282 | FUSE-FERRULE ; 250V,4A,TIME LAG, GLASS, 5*20 | X | X | O |
| | RF3,4 | 3601-000282 | FUSE-FERRULE ; 250V,4A,TIME LAG, GLASS, 5*20 | O | O | O |
| | JWA | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | O | X | X |
| | JWB | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | O | X | X |
| | JWC | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | X | X |
| | JWD | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | O | X |
| | JWE | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | X | O |
| | JWF | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | X | O |
| | JWG | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | O | X | X |

## * Power PCB Pats Option List

| PCB Ass'y | Location no. | Code no. | Description & Specification | MAX880 | | |
|---|---|---|---|---|---|---|
| | | | | DUAL | 230V | 115V |
| Power PCB Ass'y | RF1 | 3601-000263 | FUSE-FERRULE ; 250V,2A,TIME LAG, GLASS, 5*20 | O | X | X |
| | RF2 | 3601-000263 | FUSE-FERRULE ; 250V,3.15A,TIME LAG, GLASS, 5*20 | O | O | X |
| | | 3601-000301 | FUSE-FERRULE ; 250V,6.3A,TIME LAG, GLASS, 5*20 | X | X | O |
| | RF3,4 | 3601-000282 | FUSE-FERRULE ; 250V,4A,TIME LAG, GLASS, 5*20 | O | O | O |
| | JWA | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | O | X | X |
| | JWB | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | O | X | X |
| | JWC | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | X | X |
| | JWD | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | O | X |
| | JWE | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | X | O |
| | JWF | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | X | X | O |
| | JWG | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V, 52.4MM,1/0.5 | O | X | X |

## *VFD List

| PCB Ass'y | Location no. | Code no. | Description & Specification | MAX870 | MAX880 |
|---|---|---|---|---|---|
| Front PCB Ass'y | VFD | AH07-20045T | VF-DISPLAY ; SVA-16MM 14,16SEG, 125.0*40.0 | O | O |

## *Power Transformer Code List

| Code no. | Description & Specification | Model | Power Source |
|---|---|---|---|
| AH26-80142X | TRANS-POWER ; E185,8*57,115/230V, 50/60Hz | MAX-880 | 115/230V |
| AH26-80142Y | TRANS-POWER ; E185,8*57,115/230V, 50/60Hz | MAX-870/MAX-860 | 115/230V |
| AH26-80142Z | TRANS-POWER ; E185,8*57,115/230V, 50/60Hz | MAX-850 | 115/230V |
| AH26-80142U | TRANS-POWER ; E185,8*57,115/230V, 50/60Hz | MAX-850 | 115/230V |
| AH26-80142V | TRANS-POWER ; E185,8*57,115/230V, 50/60Hz | MAX-870/MAX-860 | 115/230V |
| AH26-80142W | TRANS-POWER ; E185,8*57,115/230V, 50/60Hz | MAX-880 | 115/230V |

## *BAND-Option List (Main PCB Ass'y)

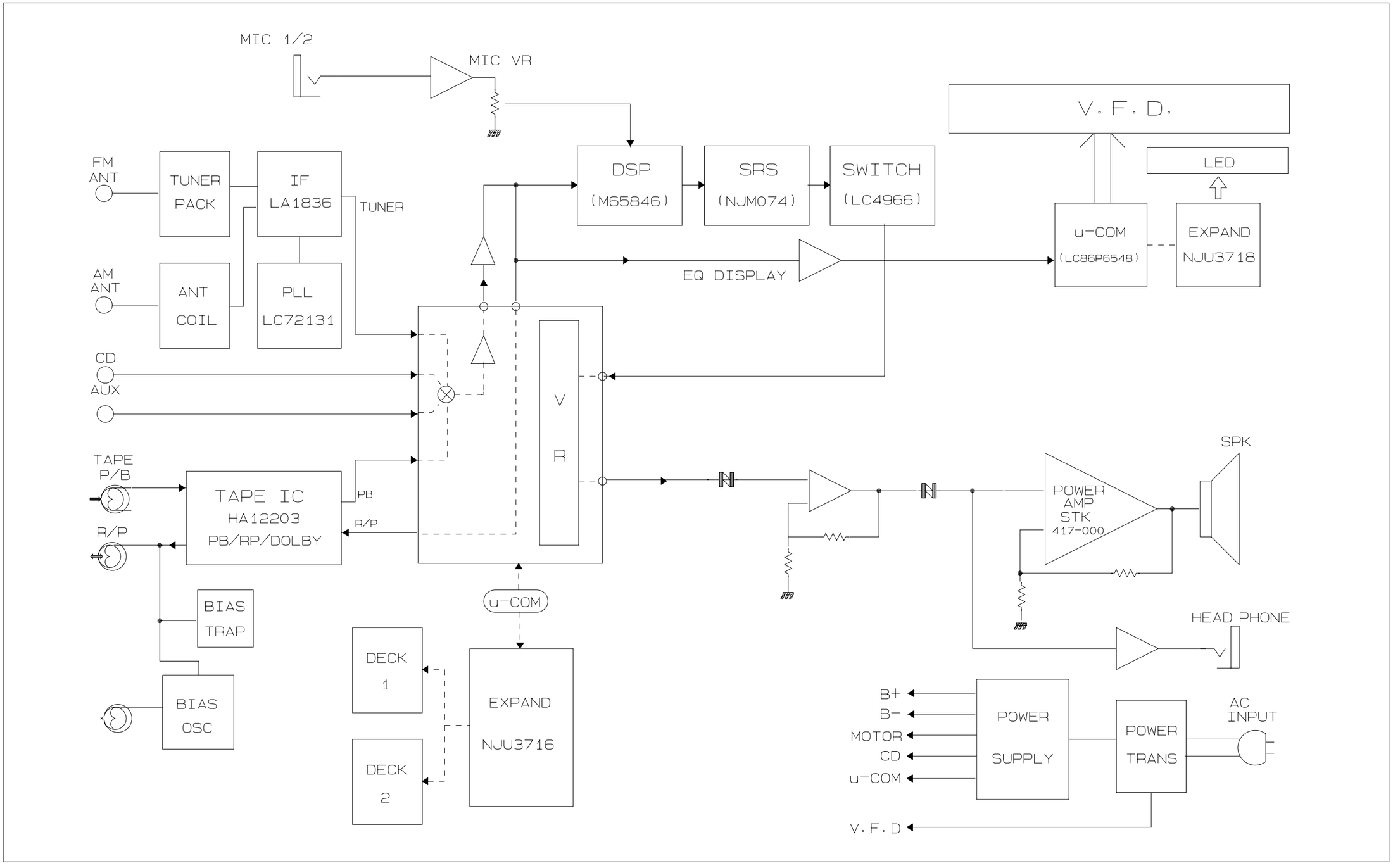
| Location no. | Code no. | Description & Specification | L-BAND (FTZ,CE) | L-BAND (General) | T-BAND |
|---|---|---|---|---|---|
| TFE1 | AH40-10001T | TUNER ; FE415-G11,-,75ohm | O | X | X |
| | AH40-10001U | TUNER ; FE337-A05,-,75ohm | X | O | O |
| J6,7,8 | 2707-000029 | R-CHIP ; 0ohm, 5%,1/10W,DA,TP,2012 | X | X | O |
| TR20,21 | 2707-000586 | R-CHIP ; 22Kohm, 5%,1/10W,DA,TP,2012 | O | O | X |
| TR22 | 2707-000300 | R-CHIP ; 10ohm, 5%,1/10W,DA,TP,2012 | O | O | X |
| JW3,4 | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V,52.4MM | X | X | O |
| IQ5,6,7 | 0501-000398 | TR-SMALL SIGNAL ; KSC945,NPN,250mW, TO-92,T | O | O | X |
| TFL1,3 | 2903-000102 | FILTER-CERAMIC ; BP,10.7MHZ+ -25KHZ 150KHZ + | O | X | X |
| | 2903-000105 | FILTER-CERAMIC ; BP,10.7MHZ+ -25KHZ 180KHZ + | X | O | O |
| JW18 | 3811-000389 | WIRE-NO SHEATH CU ; SPCW,300V,52.4MM | X | O | O |
| TFL2 | 2903-000105 | FILTER-CERAMIC ; BP,10.7MHZ+ -25KHZ 180KHZ + | O | X | X |
| TL1 | AH27-80060B | COIL-OSC ; RBQ-07VB,373UH,MW/LW-RF | O | O | X |
| | AH26-80060A | COIL-OSC ; RBW-07VB,345UH,AM+RF | X | X | O |

## *MIC Option List

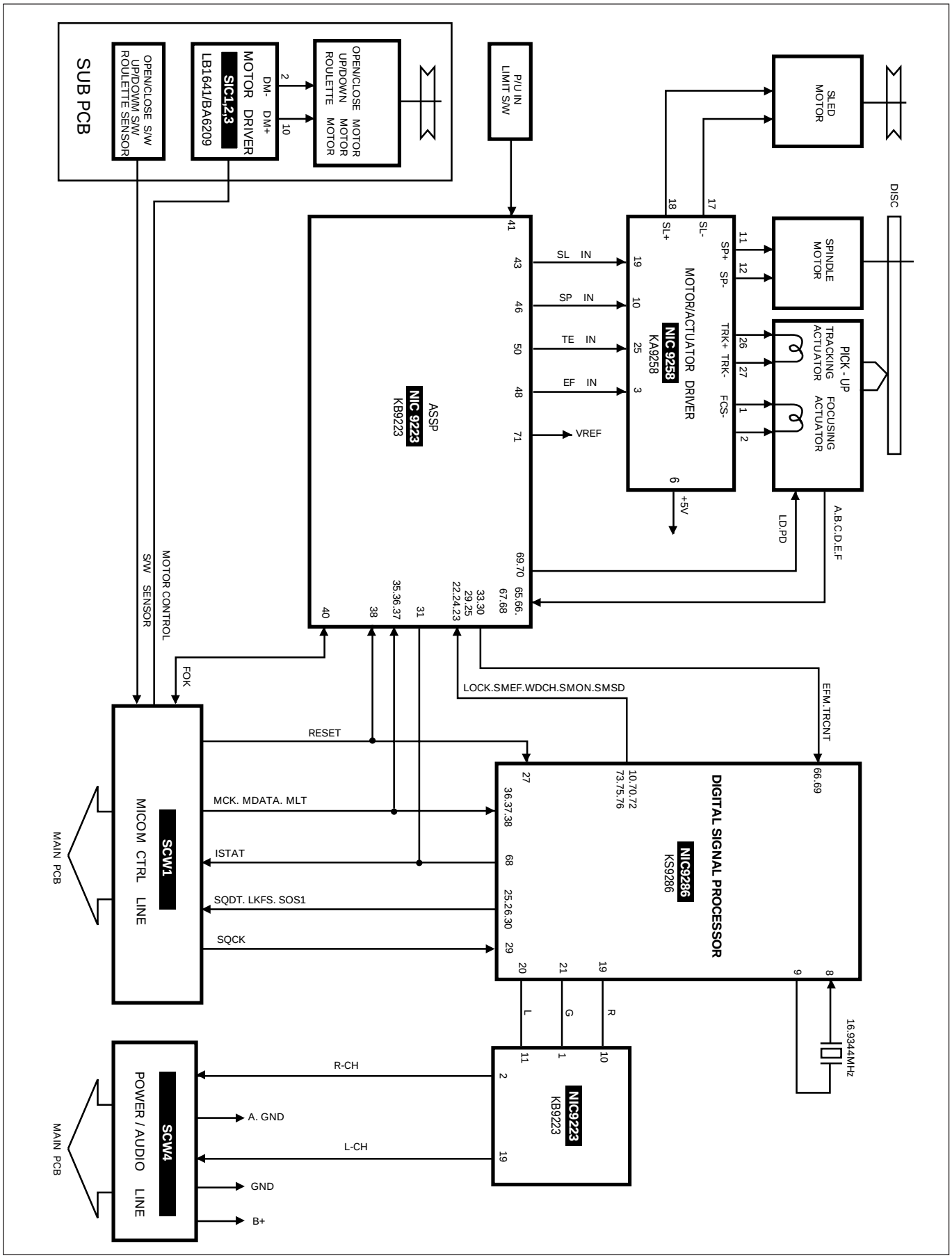
| PCB Ass'y | Location No. | Code no. | Description & Specification | Mic Option | Without Mic Option |
|---|---|---|---|---|---|
| Front PCB Ass'y | MIC2,3 | 3722-001190 | JACK-PHONE ; 9P/2C,6.43MM,AU,BLK,RC6701 | O | X |
| | MVR1 | 2101-000130 | VR-ROTARY ; 10Kohm,20%1/10W,TOP | O | X |
| | MIC1 | 1201-000163 | IC-OP AMP ;4560,SOP,8P,150ML,DUAL,100V/M | O | X |
| | MQ1,2 | 0501-000407 | TR-SMALL SIGNAL ; KSD471A-Y,NPN,800mW | O | X |
| | MQ3,UQ8 | 0501-000398 | TR-SMALL SIGNAL ; KSC945,NPN,250mW | O | X |
| | UQ7 | 0501-000398 | TR-SMALL SIGNAL ; KSC945,NPN,250mW | O | X |
| | UR121 | 2001-000857 | R-CARBON;560ohm, 5%,1/8W,AA,TP,1.8x3.2mm | O | X |
| | MR4 | 2007-000300 | R-CHIP;10Kohm,5%,1/10W,DA,TP,2012 | O | X |
| | ULD17 | 0601-000245 | LED;ROUND,RED,3.1mm, 650nm | O | X |
| | SW35 | 3404-000165 | SWITCH-TACT;12V,50MA,160GF+-50GF | O | X |
| | MR1,2 | 2001-000793 | R-CARBON;47ohm,5%,1/8W,AA,TP,1.8X3.2mm | O | X |
| | MD3,4,5,6 | 0401-000101 | DIODE-SWITCHING;1N4148,100V,200mA,500mV | O | X |
| | MC9,16,17 | 2401-001917 | C-AL;1UF,20%,50V,-,TP,5X7MM | O | X |
| | MC5 | 2401-000918 | C-AL;22UF,20%,16V,-,TP,6.3X7.5MM | O | X |
| | MC10,11 | 2401-001931 | C-AL;220UF,20%,50V,-,TP,4X7MM | O | X |
| | MC6,8 | 2401-001511 | C-AL;47UF,20%,16V,-,TP,6X7MM | O | X |
| | MC7 | 2401-001952 | C-AL;4.7UF,20%,50V,-,TP,6.3X7MM | O | X |
| | MC3,24 | 2203-000239 | C-CERAMIC,CHIP;100pF,5%,50V,NPO,TP,2012 | O | X |
| | MC12 | 2203-000818 | C-CERAMIC,CHIP;33pF,5%,50V,NPO,TP,2012 | O | X |
| | MR11,12 | 2007-000300 | R-CHIP; 10Kohm,5%,1/10W,DA,TP,2012 | O | X |
| | MR3,7,8, 50,51, UR128 | 2007-000872 | R-CARBON; 4.7Kohm,5%,1/10W,DA,TP,2012 | O | X |
| | MR6 | 2007-000778 | R-CHIP; 330Kohm,5%,1/10W,DA,TP,2012 | O | X |
| | MR14,15 MR27 | 2007-000468 | R-CHIP;1Kohm,5%,1/10W,DA,TP,2012 | O | X |
| | UR119 | 2001-000734 | R-CARBON; 4.7Kohm,5%,1/8W,DA,TP,2012 | O | X |
| | JW137 138,139 140 | 2007-000029 | R-CHIP; 0ohm,5%,1/10W,DA,TP,2012 | O | X |
| | MC13 | 2203-001537 | C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012 | O | X |
| | MC14 | 2203-000595 | C-CERAMIC,CHIP;220pF,5%,50V,X7R,TP,2012 | O | X |
| | MR5 | 2007-000282 | R-CHIP;100Kohm,5%,1/10W,DA,TP,2012 | O | X |
| | UR153 | 2007-000941 | R-CHIP;47Kohm,5%,1/10W,DA,TP,2012 | O | X |
| | UR21 | 2001-000857 | R-CARBON;560ohm,5%,1/8W,AA,TP | O | X |
| | MR13 | 2007-000931 | R-CARBON;470ohm,5%,1/8W,AA,TP | O | X |
| | JW489 | 3811-000389 | WIRE-NO SHEATH CU;SPCW,300V,52.4MM 1/0.5 | X | O |

# 9. Block Diagrams

## 9-1 Main



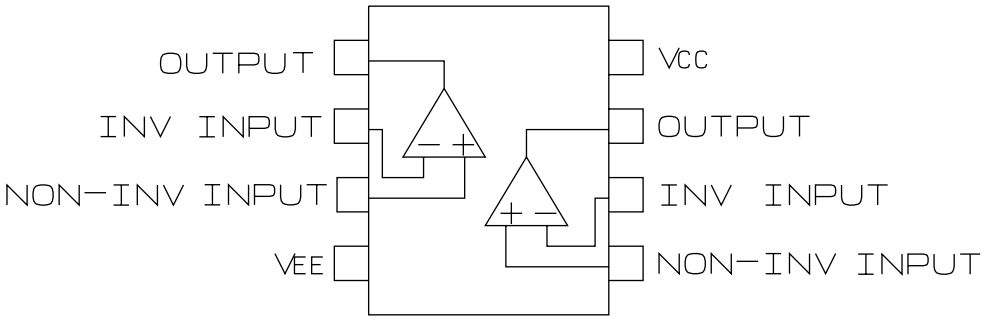
# 9-2 CD


SUB PCB
OPEN/CLOSE S/W
UP/DOWM S/W
ROULETTE SENSOR
DM-
DM+
MOTOR DRIVER
SIC1,2,3
LB1641/BA6209
OPEN/CLOSE MOTOR
UP/DOWN MOTOR
ROULETTE MOTOR
P/U IN
LIMIT S/W
SLED MOTOR
DISC
SPINDLE MOTOR
PICK - UP
TRACKING ACTUATOR
FOCUSING ACTUATOR
MOTOR/ACTUATOR DRIVER
NIC 9258
KA9258
SL+
SL-
SP+
SP-
TRK+
TRK-
FCS-
+5V
ASSP
NIC 9223
KB9223
SL IN
SP IN
TE IN
EF IN
VREF
LD.PD
A.B.C.D.E.F
S/W SENSOR
MOTOR CONTROL
FOK
LOCK.SMEF.WDCH.SMON.SMSD
EFM.TRCNT
RESET
MCK. MDATA. MLT
ISTAT
SQDT. LKFS. SOS1
SQCK
MICOM CTRL LINE
SCW1
MAIN PCB
DIGITAL SIGNAL PROCESSOR
NIC9286
KS9286
16.9344MHz
L
G
R
NIC9223
KB9223
R-CH
A. GND
L-CH
GND
B+
POWER / AUDIO LINE
SCW4
MAIN PCB

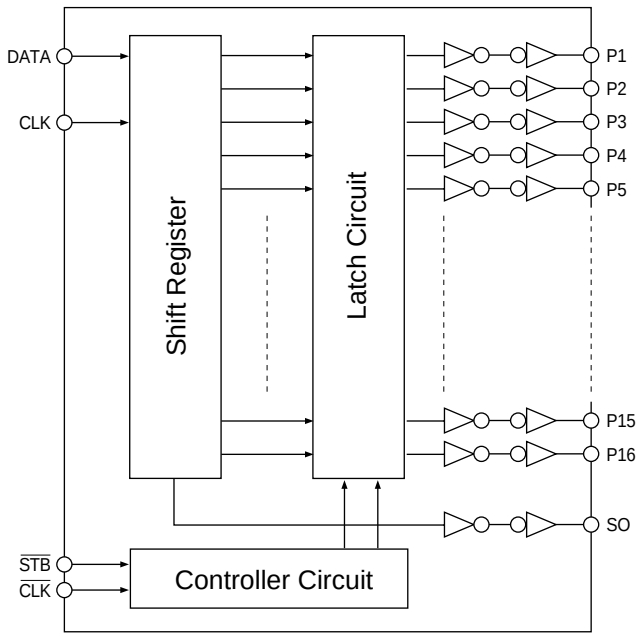
# 9-3 IC & TR Internal Diagrams

## 9-3-1 Main

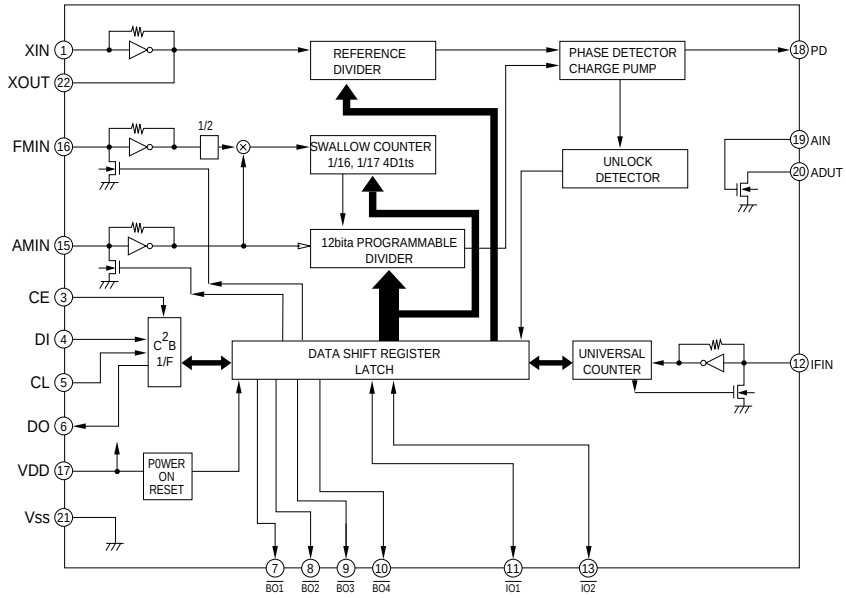
BA4560 : DIC4



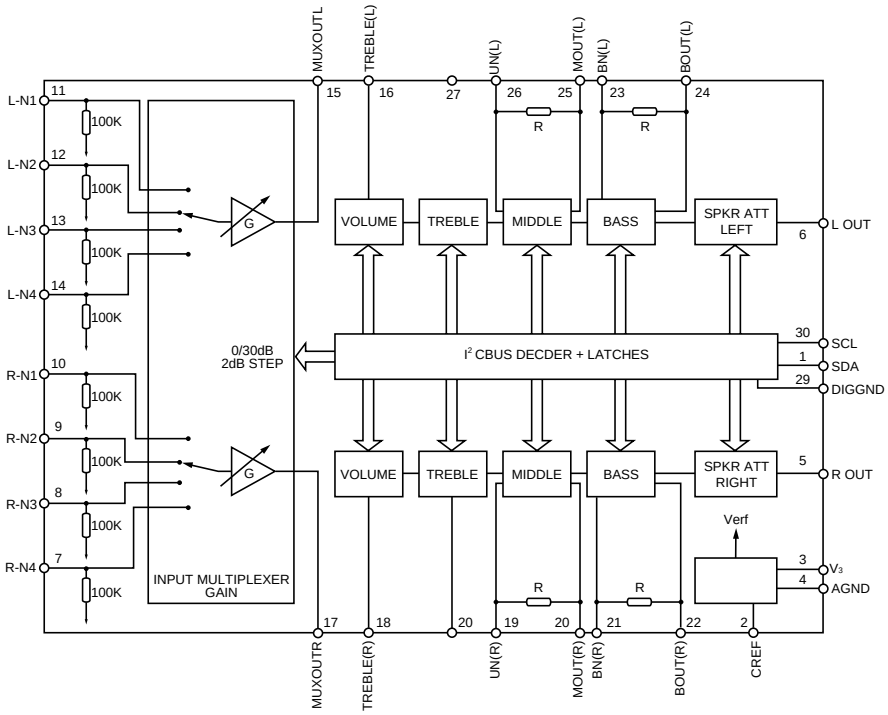

NJU3716M : JIC5



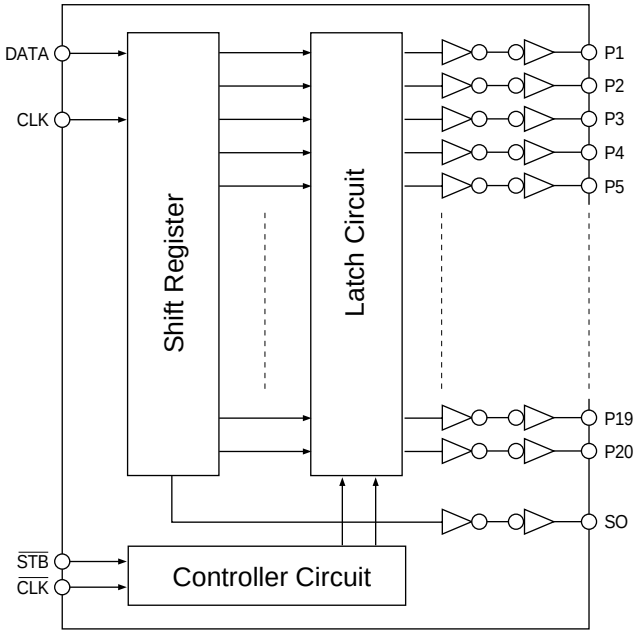
## LC72131 : TIC2



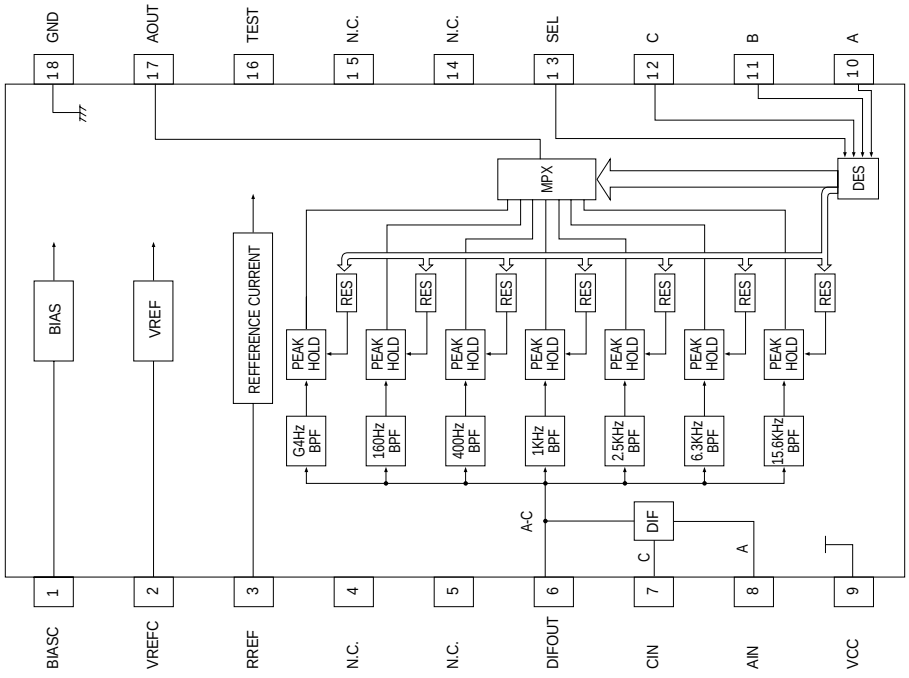

## TDA7439: FIC2



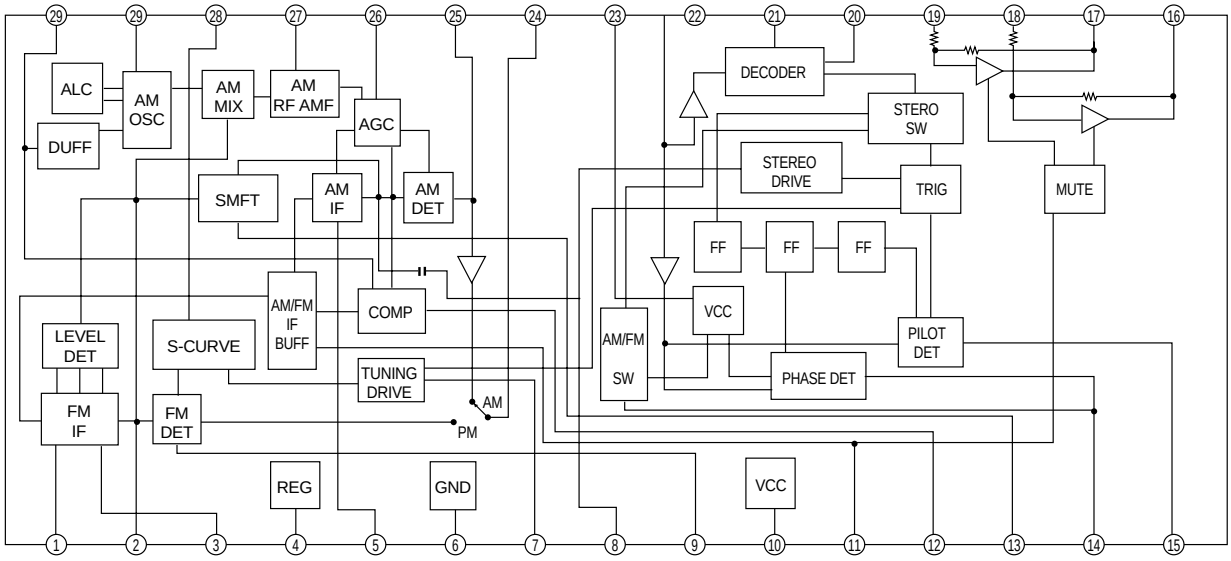
NJU3718 : UIC2



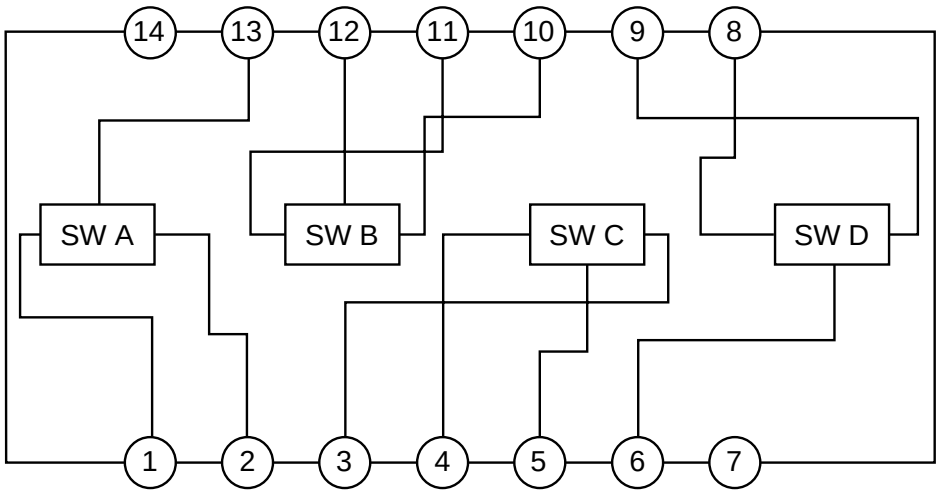

BA3834S : UIC3



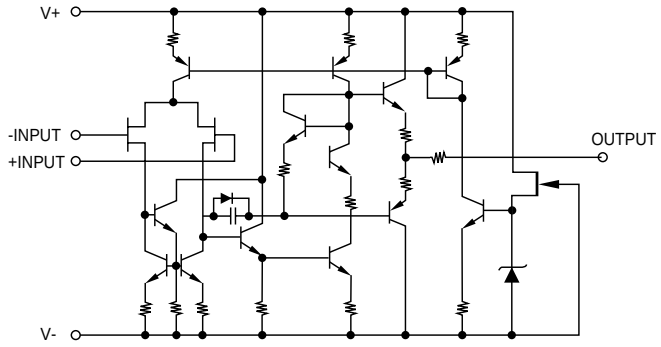
LA1836: TIC1



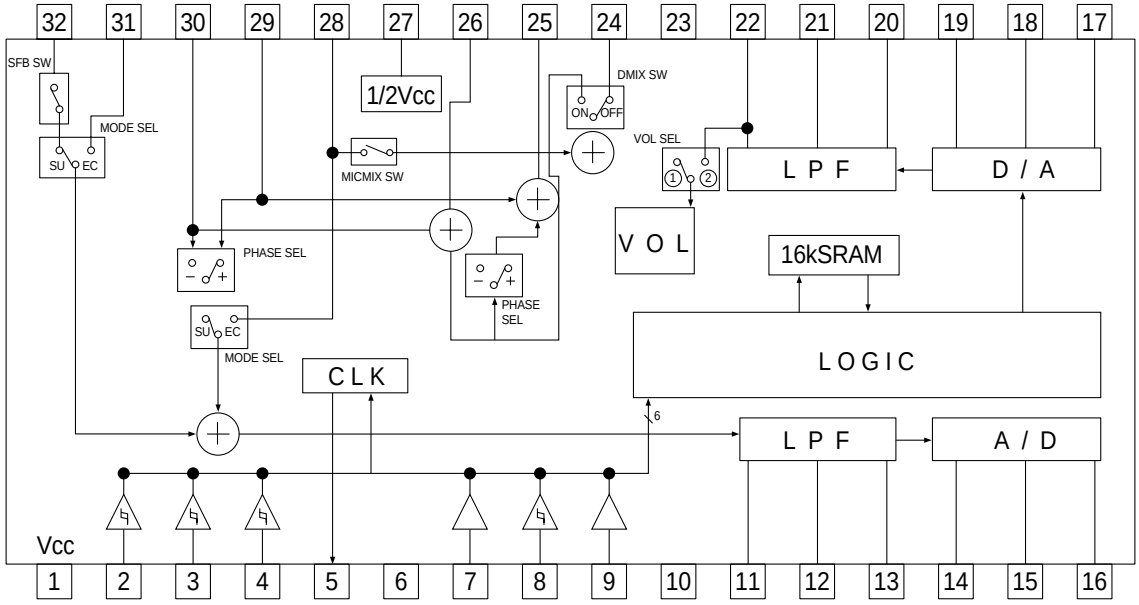

LC4966: DIC2



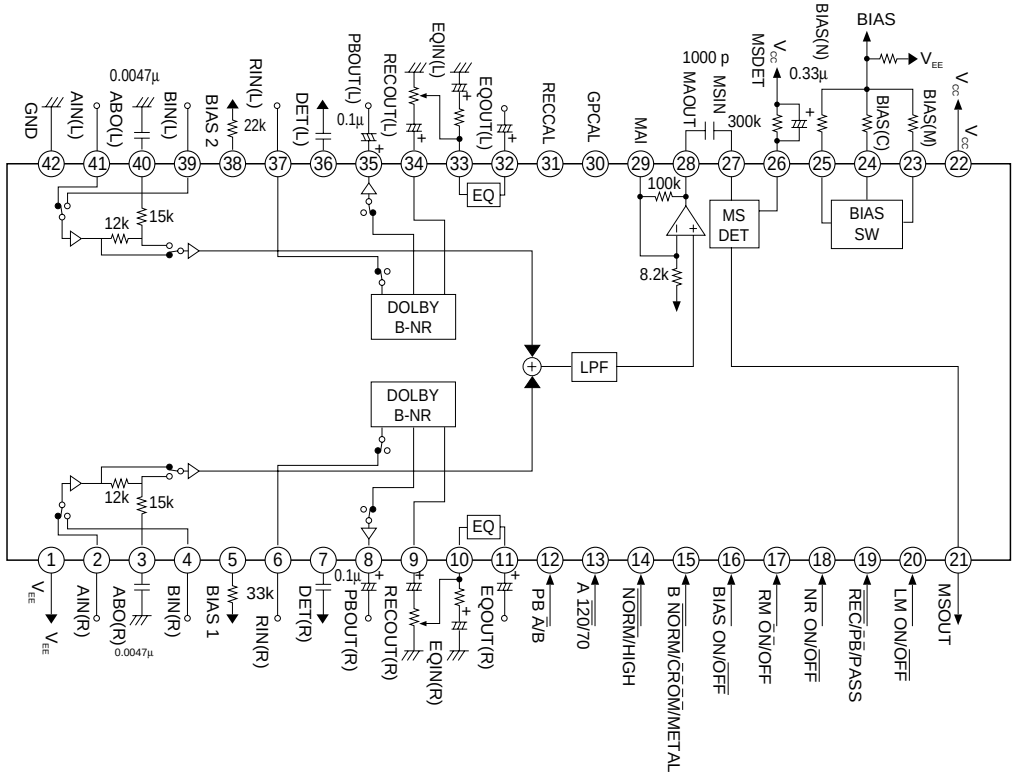
NJM074 : DIC3



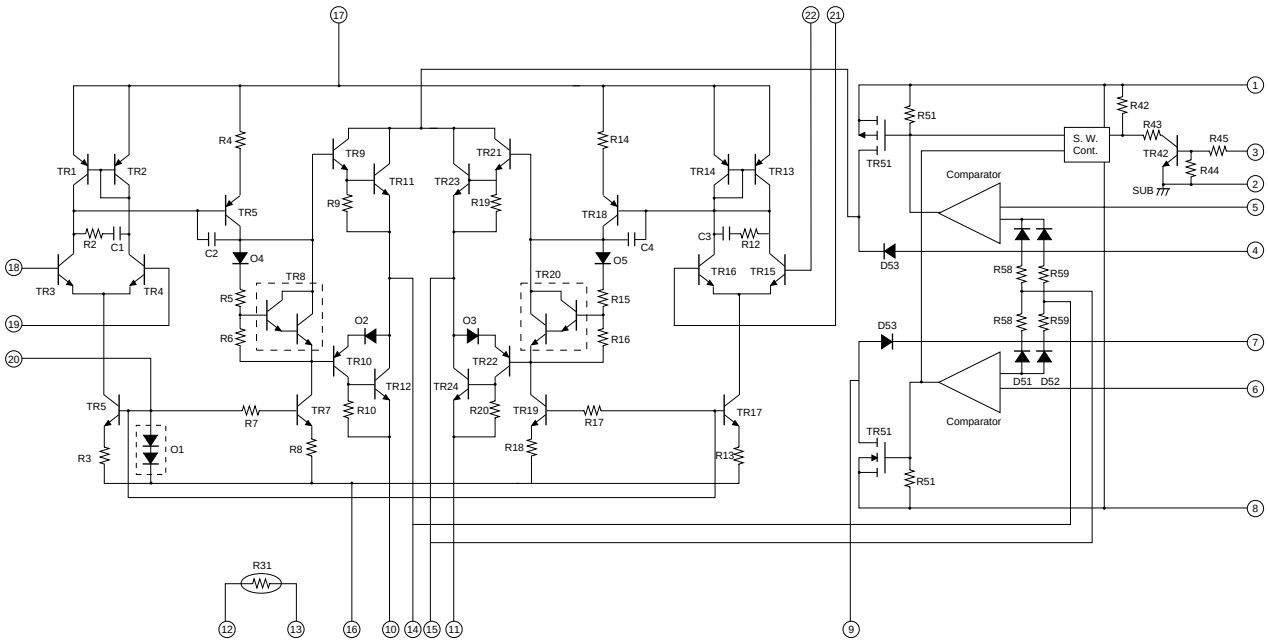

M65846FP : DIC1



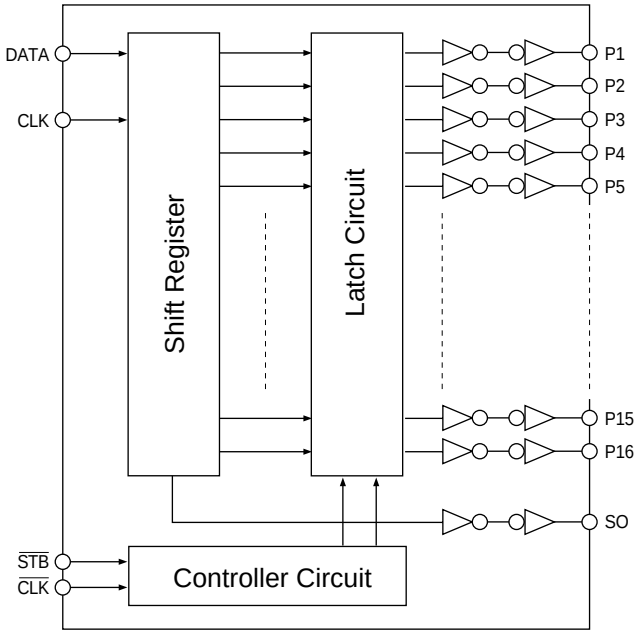
## HA12203/HA12204 : JIC3



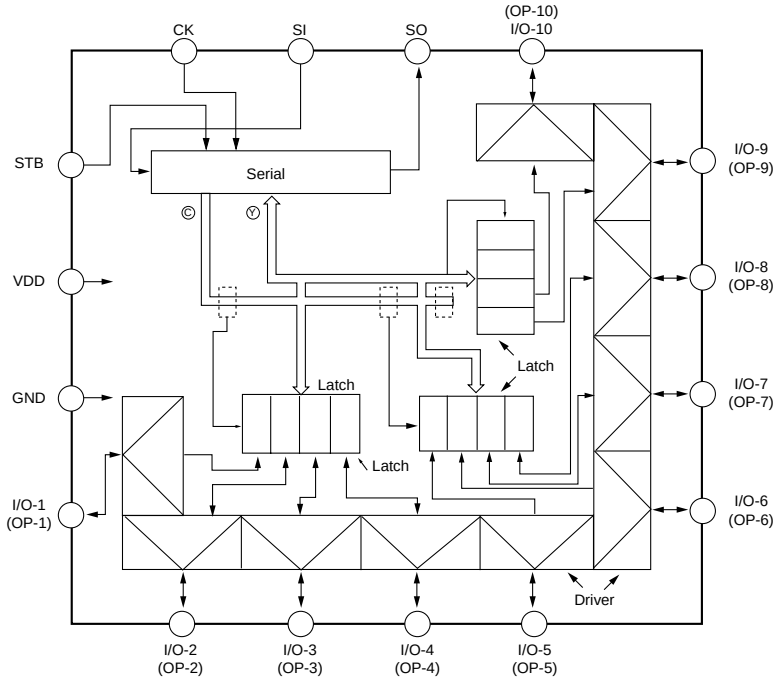

## STK417-090: AIC1



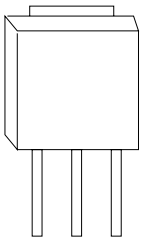
NJU3716M : JIC5




TC9173P : JIC6



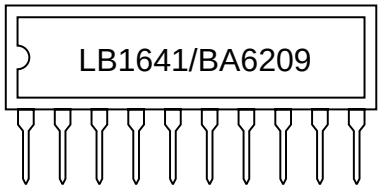
## 9-3-2 CD

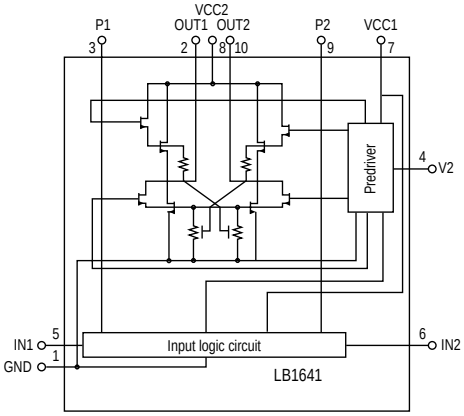


| TR | 1 | 2 | 3 |
|---|---|---|---|
| KSR1003<br>A928 | E | C | B |

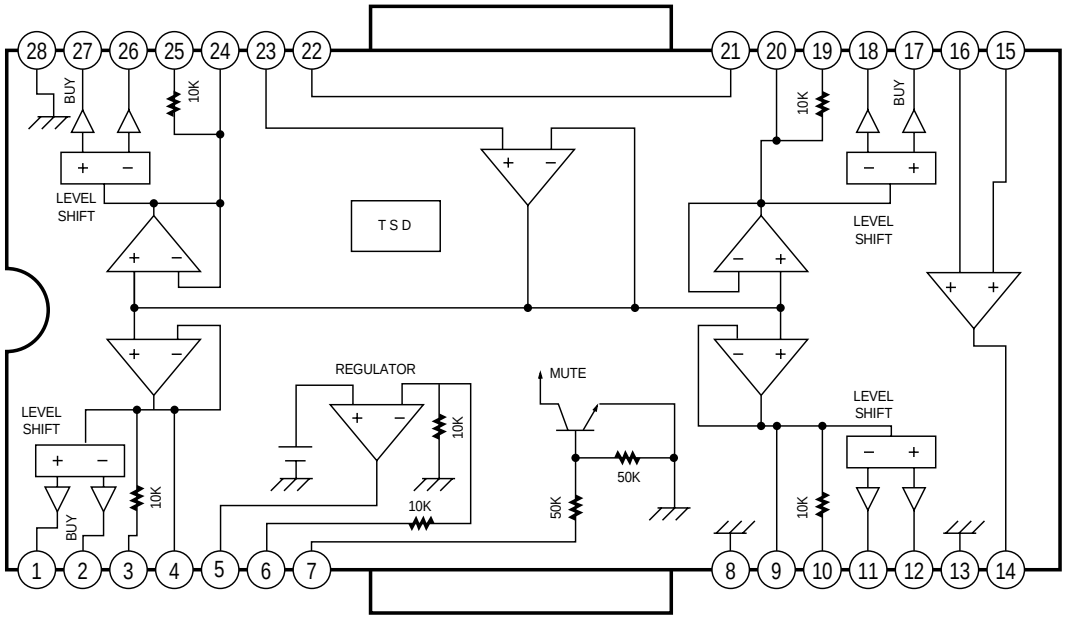
* NOTE : KSB564 = 'EBC' TYPE

LB1641/BA6209(MOTOR DRIVER) : SIC1,SIC2,SIC3,NIC1641

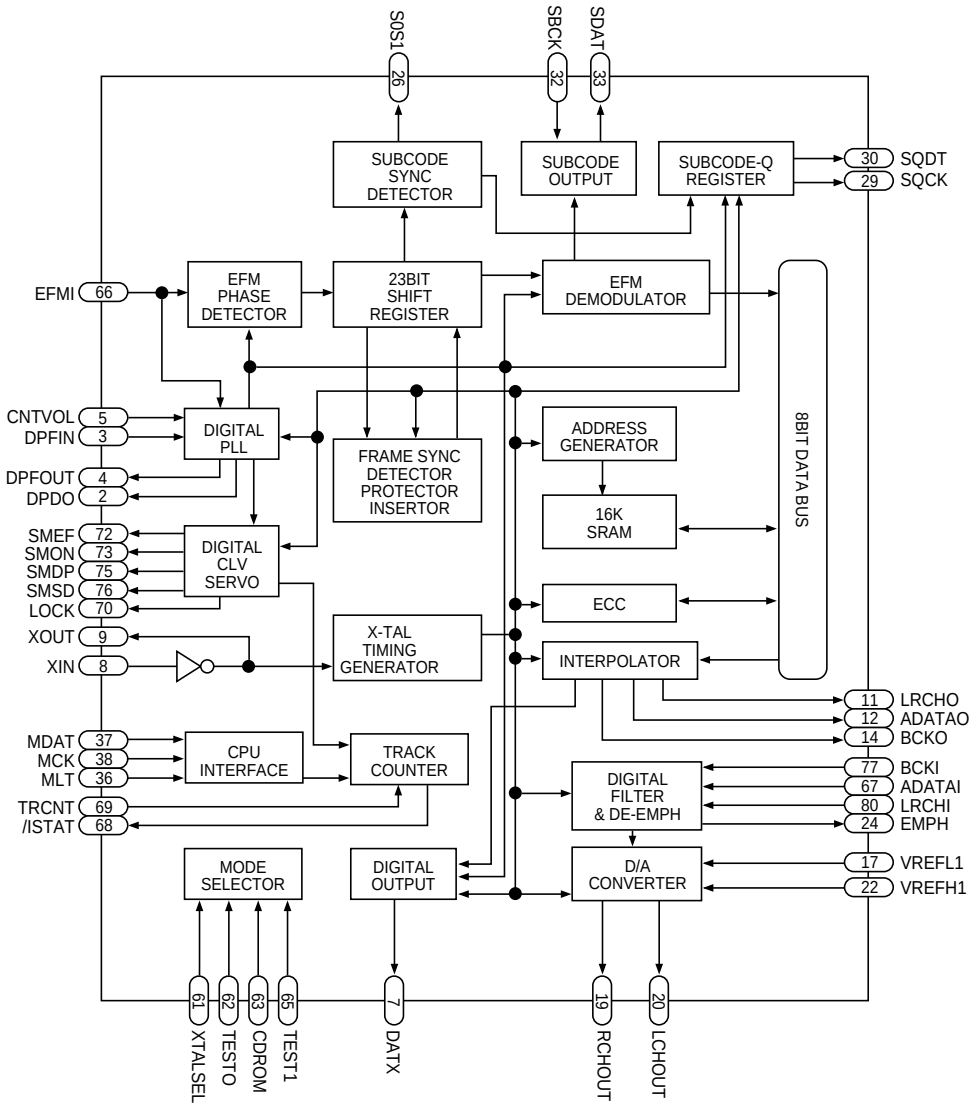


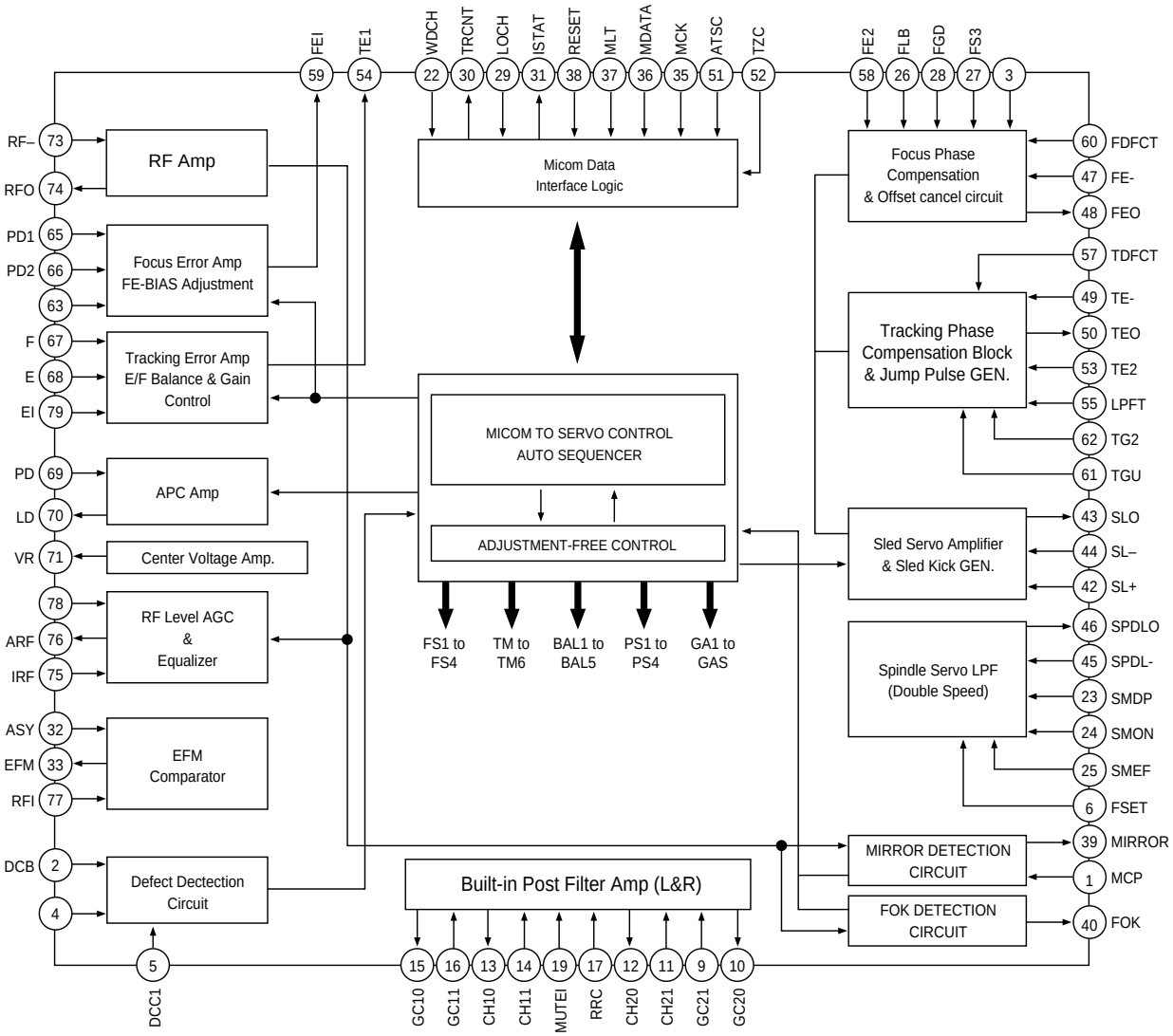

KA9258 : NIC9258



KS9286 : NIC9286



KB9223 : NIC9223



## 9-4 µ-COM : UIC1

| No. | Port | Name | I/O | Function |
|---|---|---|---|---|
| 1 | P 16 | D12 | I | TC9173 INPUT |
| 2 | 17 | JOG | I | MULTI JOG IN |
| 3 | 30 | POWER | O | POWER ON/OFF |
| 4 | 31 | TUNED | I/O | TUNED/DSP MUTE |
| 5 | 32 | A/MUTE | O | AUDIO MUTE |
| 6 | 33 | CE11 | O | LC72131(PLL) CE |
| 7 | 34 | DI1 | I | LC72131 DATA INPUT |
| 8 | 35 | DO1 | O | LC72131 /TDA7439 |
| 9 | 36 | CLK1 | O | LC72131 /TDA7439 |
| 10 | 37 | CE31 | O | M65846 CE |
| 11 | 70 | PSNS | I | POWER SENSE |
| 12 | RESET | | | |
| 13 | P 74 | MO/ST | O | FM MONO/STEREO |
| 14 | 75 | CF2 | | SUB OSC(CLOCK) |
| 15 | VSS1 | GND | | MAIN GND |
| 16 | CF 1 | XT1 | | MAIN OSC |
| 17 | 2 | XT2 | | MAIN OSC |
| 18 | VDD1 | | | MAIN 5V |
| 19 | P 80 | THS | I | POWER AMP PROTECT/HPS |
| 20 | 81 | AMPS | I | AMPS SIGNAL |
| 21 | 82 | EQ IN | I | EQUALIZER INPUT |
| 22 | 83 | KEY1 | I | A/D KEY INPUT 1 |
| 23 | 84 | KEY2 | I | A/D KEY INPUT 2 |
| 24 | 85 | JOG | I | MULTI JOG IN |
| 25 | 86 | KEY3 | I | A/D KEY INPUT 3 |
| 26 | 87 | MIC | I | MIC ON SNS |
| 27 | P 71 | T/SENS | I | CD TRAY SENSE |
| 28 | 72 | SCOR | I | SCOR INT |
| 29 | 73 | REMO | I | REMOCON INPUT |
| 30 | S 0 | G1 | O | VFD GRID 1 |
| 31 | 1 | 2 | O | VFD GRID 2 |
| 32 | 2 | 3 | O | VFD GRID 3 |
| 33 | 3 | 4 | O | VFD GRID 4 |
| 34 | 4 | 5 | O | VFD GRID 5 |
| 35 | 5 | 6 | O | VFD GRID 6 |
| 36 | 6 | 7 | O | VFD GRID 7 |
| 37 | 7 | 8 | O | VFD GRID 8 |
| 38 | 8 | 9 | O | VFD GRID 9 |
| 39 | 9 | 10 | O | VFD GRID 10 |
| 40 | S 10 | 11 | O | VFD GRID 11 |
| 41 | 11 | 12 | O | VFD GRID 12 |
| 42 | 12 | 13 | O | VFD GRID 13 |
| 43 | 13 | 14 | O | VFD GRID 14 |
| 44 | 14 | 15 | O | VFD GRID 15 |
| 45 | 15 | 16 | O | VFD GRID 16 |
| 46 | VDD3 | | | |
| 47 | S 16 | S1 | | VFD SEG 1 |
| 48 | 17 | 2 | | VFD SEG 2 |
| 49 | 18 | 3 | O | VFD SEG3 |
| 50 | 19 | 4 | O | VFD SEG4 |

| No. | Port | Name | I/O | Function |
|---|---|---|---|---|
| 51 | VP | | | |
| 52 | S 20 | S5 | O | VFD SEG 5 |
| 53 | 21 | S6 | O | VFD SEG 6 |
| 54 | 22 | S7 | O | VFD SEG 7 |
| 55 | 23 | S8 | O | VFD SEG 8 |
| 56 | 24 | S9 | O | VFD SEG 9 |
| 57 | 25 | S10 | O | VFD SEG 10 |
| 58 | 26 | S11 | O | VFD SEG 11 |
| 59 | 27 | S12 | O | VFD SEG 12 |
| 60 | 28 | S13 | O | VFD SEG 13 |
| 61 | 29 | S14 | O | VFD SEG 14 |
| 62 | 30 | S15 | O | VFD SEG 15 |
| 63 | 31 | S16 | O | VFD SEG 16 |
| 64 | 32 | S17 | O | VFD SEG 17 |
| 65 | PE 1 | OPT | I | TUNER/TIME/PRO-LOGIC |
| 66 | 2 | LKFS | I | |
| 67 | 3 | FOK | I | FOCUS OK |
| 68 | 4 | SENSE | I | SENSE & LIMIT SWITCH |
| 69 | 5 | SENSE1 | I | SENSE1 |
| 70 | 6 | SW2 | I | |
| 71 | 7 | SW1 | I | |
| 72 | VDD 4 | | | |
| 73 | PF 0 | RL+ | O | ROULETTE+ |
| 74 | 1 | LAT1 | O | LATCH |
| 75 | 2 | OPEN | O | OPEN MOTOR |
| 76 | 3 | CLOSE | O | CLOSE MOTOR |
| 77 | 4 | XRST | O | RESET |
| 78 | 5 | C-LAT | O | C-LATCH/REM DO/PRO DO |
| 79 | 6 | EMPH | O | EMPHASI/REM CE/PRO LED P |
| 80 | 7 | EVR | O | ERE VR SW |
| 81 | PG 0 | VCLK | O | VCD-CLOCK/REM MUTE/PRO-L |
| 82 | 1 | VR | I | ELE VR SW |
| 83 | 2 | V-LAT | I | VCD LAT/REM NAR/PRO CE2 |
| 84 | 3 | V-DATA | I/O | VCD DATA/REM CH/PRO CE1 |
| 85 | P 00 | MCK | O | DSP/SSP CONTROL CLOCK |
| 86 | 01 | C-DATA | O | C-DATA/REM CLK/PRO CLK |
| 87 | 02 | MDATA | O | DSP/SSP CONTROL DATA |
| 88 | 03 | 1 SOL | O | 1 DECK SOLENOID |
| 89 | VSS2 | | | |
| 90 | VDD2 | | | |
| 91 | P 04 | CE32 | O | TC9173 CE |
| 92 | 05 | MLT | O | DSP/SSP CONTROL LATCH |
| 93 | 06 | CE34 | O | NJU3718 CHIP ENABLE |
| 94 | 07 | SOL2 | O | 2 DECK SOLENOID |
| 95 | 10 | TRCNT | O | LD ON |
| 96 | 11 | SQDT | I | SUBQ DATA INPUT |
| 97 | 12 | SQRT | O | SUBQ DATA INPUT CLOCK |
| 98 | 13 | CLK3 | O | NJU3716/18/TC9173/M65846 |
| 99 | 14 | DO3 | O | NJU3716/18/TC9173/M65846 |
| 100 | 15 | CE33 | O | NJU3716 CE |

NJU3718 : UIC2

| No. | Name | Function |
|---|---|---|
| 1 | P 9 | DISC2 LED |
| 2 | 10 | DISC3 LED |
| 3 | 11 | EQ A |
| 4 | 12 | EQ B |
| 5 | 13 | EQ C |
| 6 | 14 | REC/PAUSE |
| 7 | GND | |
| 8 | P 15 | TUNER FUNCTION LED |
| 9 | 16 | CD FUNCTION LED |
| 10 | 17 | TAPE FUNCTION LED |
| 11 | 18 | AUX FUNCTION LED |
| 12 | 19 | ECHO LED / PRO LED |
| 13 | 20 | SCORE LED |
| 14 | S 0 | |
| 15 | DO3 | MICOM 99 |
| 16 | CLK3 | MICOM 98 |
| 17 | CE34 | MICOM 93 |
| 18 | CLR | VDD |
| 19 | P1 | STOP LED |
| 20 | P2 | COMM` 1 LED |
| 21 | VSS | GND |
| 22 | P3 | COMM` 2 LED |
| 23 | P4 | COMM` 3 LED |
| 24 | P5 | DISC 1 LED |
| 25 | P6 | JOG LED |
| 26 | P7 | CD MUTE |
| 27 | P8 | VCD / REMAKE RESET |
| 28 | VDD | |

NJU3716 : JIC5

| No. | Name | Function |
|---|---|---|
| 1 | P 7 | STS 1 |
| 2 | 8 | R/P |
| 3 | 9 | P/B 1 |
| 4 | 10 | MOTOR |
| 5 | 11 | HI / SP |
| 6 | GND | |
| 7 | P 12 | REC 1 |
| 8 | 13 | A/B |
| 9 | 14 | NOR/HI |
| 10 | 15 | REC MUTE |
| 11 | 16 | DOLBY NR |
| 12 | S 0 | |
| 13 | DO3 | |
| 14 | CLK3 | |
| 15 | CE32 | |
| 16 | CLR | |
| 17 | P 1 | TUNER MODE |
| 18 | GND | |
| 19 | P 2 | SRS |
| 20 | 3 | |
| 21 | 4 | STS |
| 22 | 5 | LINE MUTE |
| 23 | 6 | P/B |
| 24 | VDD | |

TC9173 : JIC6

| No. | Name | Function |
|---|---|---|
| 1 | GND | GND |
| 2 | P 1 | REC / R |
| 3 | 2 | MODE / B |
| 4 | 3 | HALF / B |
| 5 | 4 | HALL / B |
| 6 | 5 | REC / F |
| 7 | 6 | MODE / A |
| 8 | 7 | HALF / A |
| 9 | 8 | NC |
| 10 | 9 | NC |
| 11 | 10 | HALL / A |
| 12 | DO 3 | |
| 13 | DI 2 | |
| 14 | CLK | |
| 15 | CE 33 | |
| 16 | CLR | |

# 9-5 RF AMP & Servo Processor(KB9223) : NIC9223

| No. | Port | Description |
|---|---|---|
| 1 | MCP | Capacitor connection pin for mirror hold |
| 2 | DCB | Capacitor connection pin for defect Bottom hold |
| 3 | FRSH | Capacitor connection pin for time constant to generate focus search waveform |
| 4 | DCC2 | The input pin through capacitor of defect bottom hold output |
| 5 | DCC1 | The output pin of defect bottom hold |
| 6 | FSET | The peak frequency setting pin for focus, tracking servo and cut of frequency of CLV LPF |
| 7 | VDDA | Analog VCC for servo part |
| 8 | VCCP | Vcc for post filter |
| 9 | GC21 | Amplifier negative input pin for gain and low pass filtering of DAC output CH2 |
| 10 | GC20 | Amplifier output pin for gain and low pass filtering of DAC output CH2 |
| 11 | CH2I | The input pin for post filter channel2 |
| 12 | GC2O | The output pin for post filter channel2 |
| 13 | CH1O | The output pin for post filter channel1 |
| 14 | CH1I | The input pin for post filter channel1 |
| 15 | GC1O | Amplifier output pin for gain and low pass filtering of DAC output CH1 |
| 16 | GC1I | Amplifier negative input pin for gain and low pass filtering of DAC output CH1 |
| 17 | RRC | The pin for noise reduction of post filter bias |
| 18 | VSSP | VSS for post filter |
| 19 | MUTEI | The input pin for post filter muting control |
| 20 | ISET | The input pin for current setting of focus search, track jump and sled kick voltage |
| 21 | VREG | The output pin of regulator |
| 22 | WDCK | The clock input pin for auto sequence |
| 23 | SMDP | The input pin of CLV control output pin SMDP of DSP |
| 24 | SMON | The input pin for spindle servo ON through SMON of DSP |
| 25 | SMEF | The input pin of provide for an external LPF time constant |
| 26 | FLB | Capacitor connection pin to perform rising low bandwidth of focus loop |
| 27 | FS3 | The pin for high frequency gain change of focus loop with internal FS3 pin switch |
| 28 | FGD | Reducing high frequency gain with capacitor between FS3 pin |
| 29 | LOCK | Sled runaway prevention pin |
| 30 | TRCNT | Track count output pin |
| 31 | ISTAT | Internal status output pin |
| 32 | ASY | The input pin for asymmetry control |
| 33 | EFM | EFM comparator output pin |
| 34 | VSSA | Analog VSS for servo part |
| 35 | MCK | Micom clock input pin |
| 36 | MDATA | Micom data input pin |
| 37 | MLT | Micom data latch input pin |
| 38 | RESET | Reset input pin |
| 39 | MIRROR | The mirror output for test |
| 40 | FOK | The output pin of focus OK comparator |

| No. | Port | Description |
|---|---|---|
| 41 | SSTOP | The pin for detection whether pick_up position is innermost or not |
| 42 | SL+ | The noninverting input pin of sled servo amplifier |
| 43 | SLO | The output pin of sled servo amplifier |
| 44 | SL- | The inverting input pin of sled servo amplifier |
| 45 | SPDL- | The noninverting input pin of spindle servo amplifier |
| 46 | SPDLO | The output pin of spindle servo amplifier |
| 47 | FE- | The inverting input pin of focus servo amplifier |
| 48 | FEO | The output pin of focus servo amplifier |
| 49 | TE- | The inverting input pin of tracking servo amplifier |
| 50 | TEO | The output pin of tracking servo amplifier |
| 51 | ATSC | The input pin for Anti-shock detection |
| 52 | TZC | The comparator input pin for tracking zero crossing detection |
| 53 | TE2 | Tracking servo input pin |
| 54 | TE1 | Tracking error amplifier output pin |
| 55 | LPFT | The input pin of tracking error low pass filtering signal |
| 56 | DVDD | The power supply pin for logic circuit |
| 57 | TDFCT | The capacitor connectiong pin for tracking defect compensation |
| 58 | FE2 | Focus servo input pin |
| 59 | FE1 | Focus error amplifier output pin |
| 60 | FDFCT | The capacitor connection pin for focus defect compensation |
| 61 | TGU | The capacitor connection pin for high frequency tracking gain switch |
| 62 | TG2 | The pin for high frequency gain change of tracking servo loop with internal TG2 switch |
| 63 | FEBIAS | Focus error bias voltage control pin |
| 64 | DVEE | The DVEE pin for logic circuit |
| 65 | PD1 | The negative input pin of RF I/V amplifier1(A+C signal) |
| 66 | PD2 | The negative input pin of RF I/V amplifier2(B+D signal) |
| 67 | F | The negative input pin of F I/V amplifier(F signal) |
| 68 | E | The negative input pin of E I/V amplifier(E signal) |
| 69 | PD | The input pin for APC |
| 70 | LD | The output pin for APC |
| 71 | VR | The output pin of (AVEE+AVCC)/2 voltage |
| 72 | VCC | VCC for RF part |
| 73 | RF- | RF summing amplifier inverting input pin |
| 74 | RFO | RF summing amplifier output pin |
| 75 | IRF | The input pin for AGC |
| 76 | ARF | The output pin for AGC |
| 77 | RFI | The input pin for EFM comparating |
| 78 | CAGC | The capacitor connection pin for AGC |
| 79 | EI | Feedback input pin of E I/V amplifier for EF Balance control |
| 80 | GND | GND for RF part |

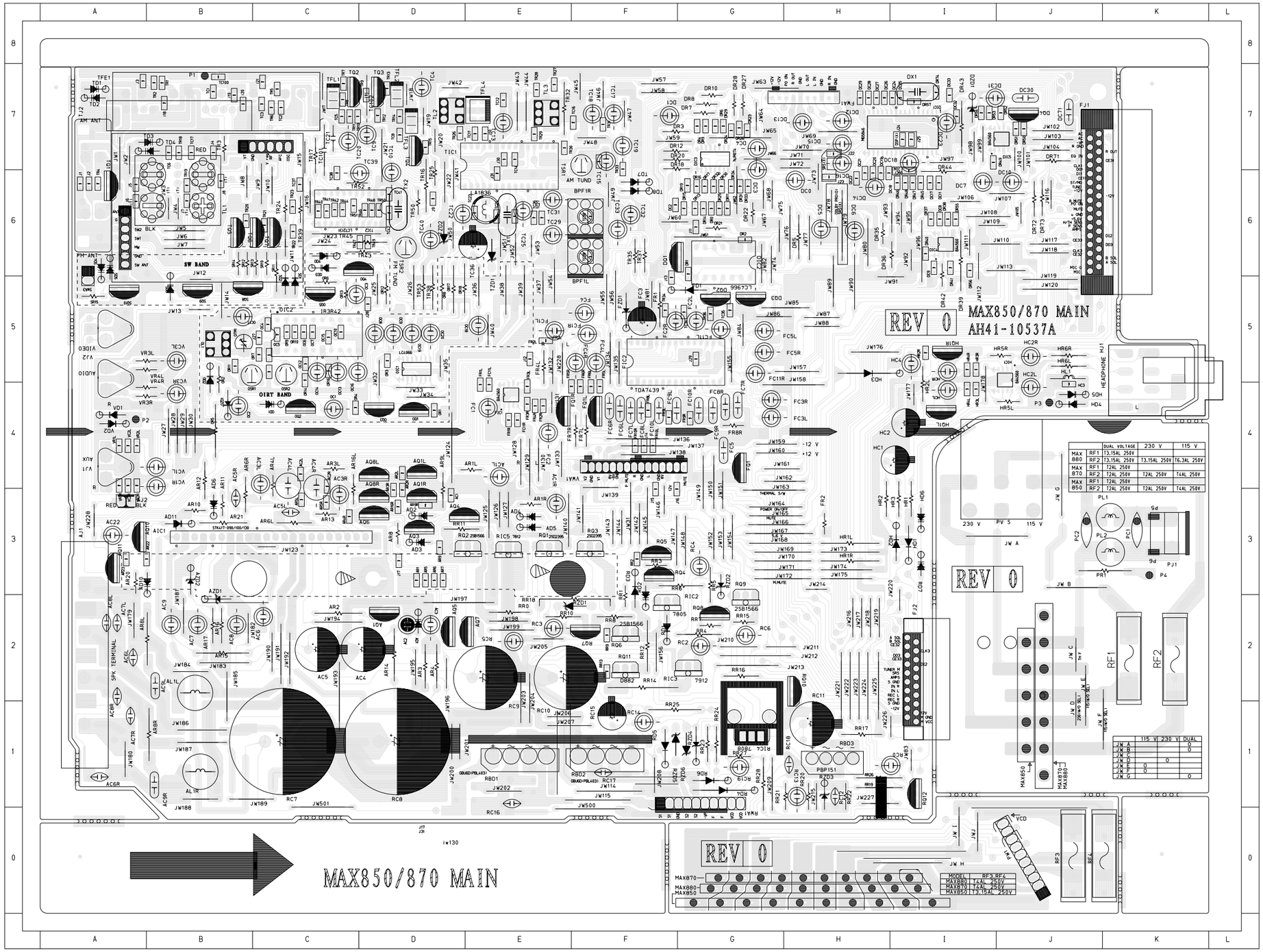
# 9-6 Digital Signal Processor(KS9286) : NIC9286

| No. | Port | Port | Description |
|---|---|---|---|
| 1 | AVDD1 | - | Analog VCC1 |
| 2 | DPDO | O | Charge pump output for Digital PLL |
| 3 | DPFIN | I | Filter input for Digital PLL |
| 4 | DPFOUT | O | Filter output for Digital PLL |
| 5 | CNTVOL | I | VCO control voltage for Digital PLL |
| 6 | AVSS1 | - | Analog Ground1 |
| 7 | DATX | O | Digital Audio output data |
| 8 | XIN | I | X'tal oscillator input |
| 9 | XOUT | O | X'tal oscillator output |
| 10 | WDCHO | O | Word clock output of 48 bit/Slot (88.2KHz) |
| 11 | LRCHO | O | Channel clock output of 48 bit/Slot (44.1KHz), 88.2KHz when ESP ON |
| 12 | ADATAO | O | Serial audio data output of 48 bit/Slot (MSB first), double speed output when ESP ON |
| 13 | DVSS1 | - | Digital Ground1 |
| 14 | BCKO | O | Audio data bit clock output of 48 bit/Slot(2.1168MHz), 4.2336MHz when ESP ON |
| 15 | C2PO | O | C2 Pointer for output audio data |
| 16 | VREFL2 | I | Input terminal2 of reference voltage "L"(Floating) |
| 17 | VREFL1 | I | Input terminal2 of reference voltage "L"(GND connection) |
| 18 | AVDD2 | - | Analog VCC2 |
| 19 | RCHOUT | O | Right-Channel audio output through D/A converter |
| 20 | LCHOUT | O | Left-Channel audio output through D/A converter |
| 21 | AVSS2 | - | Analog ground2 |
| 22 | VREFH1 | I | Input terminal1 of reference voltage "H" (VDD connection) |
| 23 | VREFH2 | I | Input terminal2 of reference voltage "H" (Floating) |
| 24 | EMPH | O | Emphasis/Non-Emphasis output, H: Emphasis ON, L: Emphasis OFF |
| 25 | LKFS | O | The Lock Status output of frame sync |
| 26 | S0S1 | O | Output of subcode sync signal(S0+S1) |
| 27 | RESET | I | System reset at "L" |
| 28 | /ESP | I | ESP function ON/OFF control("L": ESP function ON, "H": ESP function OFF) |
| 29 | SQCK | I | Clock for output Subcode-Q data |
| 30 | SQDT | O | Serial output of Subcode-Q data |
| 31 | SQOK | O | The CRC (Cycle Redundancy Check) check result signal output of Subcode-Q) |
| 32 | SBCK | I | Clock for output subcode data |
| 33 | SDAT | O | Subcode serial data output |
| 34 | DVDD1 | - | Digital VDD1 |
| 35 | MUTE | I | Mute control input ("H": Mute ON) |
| 36 | MLT | I | Latch Signal input from Micom (Schmit Trigger) |
| 37 | MDAT | I | Latch Signal input from Micom (Schmit Trigger) |
| 38 | MCK | I | Latch Signal input from Micom (Schmit Trigger) |
| 39 | DB8 | I/O | SRAM data I/O port8 (MSB) |
| 40 | DB7 | I/O | SRAM data I/O port7 |

| No. | Port | Port | Description |
|---|---|---|---|
| 41 | DB6 | I/O | SARM data I/O port 6 |
| 42 | DB5 | I/O | SARM data I/O port 5 |
| 43 | DB4 | I/O | SARM data I/O port 4 |
| 44 | DB3 | I/O | SARM data I/O port 3 |
| 45 | DB2 | I/O | SARM data I/O port 2 |
| 46 | DB1 | I/O | SARM data I/O port 1 (LSB) |
| 47 | C1F1 | I/O | Monitoring output for C1 error correction (RA1) |
| 48 | C1F2 | I/O | Monitoring output for C1 error correction (RA2) |
| 49 | C2F1 | I/O | Monitoring output for C2 error correction (RA3) |
| 50 | C2F2 | I/O | Monitoring output for C21 error correction (RA4) |
| 51 | C2FL | I/O | C2 decoder flag (RA5, “H” : When the processing C2 code is impossible correction status.) |
| 52 | /PBCK | I/O | Output of VCO/2 (4.3218MHz) (RA6) |
| 53 | DVSS2 | I/O | Digital ground2 |
| 54 | FSDW | I/O | Window or unprotected frame sync (RA7) |
| 55 | ULKFS | I/O | Frame sync protection state (RA8) |
| 56 | /JIT | I/O | Display of either RAM overflow or underflow for ±4 frame jitter margin (RA9) |
| 57 | C4M | I/O | Only monitoring signal (4.2336MHz) (RA10) |
| 58 | C16M | I/O | 16.9344MHz signal output (RA11) |
| 59 | /WE | I/O | Terminal for test |
| 60 | /CS | I/O | Terminal for test |
| 61 | XTALSEL | I | Mode Selection1 (H: 33.8688MHz, L:16.9344MHz) |
| 62 | TEST0 | I | TEST input terminal (GND connection) |
| 63 | CDROM | I | Mode Selection2 (H: CD-ROM, L: CDP) |
| 64 | SRAM | I | TEST input terminal (GND connection) |
| 65 | TEST1 | I | TEST input terminal (GND connection) |
| 66 | EFMI | I | EFM signal input |
| 67 | ADATAI | I | Serial audio data input of 48 bit/Slot (MSB first) |
| 68 | /ISTAT | O | The internal status output |
| 69 | TRCNT | I | Tracking counter input signal |
| 70 | LOCK | O | Output signal of LKFS condition sampled PBFR/16 (if LKFS is “H”, LOCK is “H”, if LKFS is sampled “L” at least 8 times by PBFR/16, LOCK is “L”) |
| 71 | PBFR | O | Write frame clock (Lock: 7.35KHz) |
| 72 | SMEF | O | LPF time constant control of the spindle servo error signal |
| 73 | SMON | O | ON/OFF control signal for spindle servo |
| 74 | DVDD2 | - | Digital VDD2 |
| 75 | SMDP | O | Spindle Motor drive (Rough control in the SPEED mode, Phase control in the PHASE mode) |
| 76 | SMSD | O | Spindle Motor drive (Velocity control in the PHASE mode) |
| 77 | BCKI | I | Audio data bit clock input of 48 bit/Slot (2.1168MHz) |
| 78 | TESTV | I | TEST input terminal (GND connection) |
| 79 | DSPEED | I | TEST input terminal (VDD connection) |
| 80 | LRCHI | I | Channel clock input of 48 bit/Slot (44.1KHz) |

# 10. PCB Diagrams

## 10-1 Main



*** RESISTOR ***

AR10 (B3)
AR11 (B3)
AR12 (B3)
AR13 (C3)
AR16 (B2)
AR16L (C3)
AR17 (B2)
AR1L (D4)
AR1R (E3)
AR2 (C2)
AR20 (A3)
AR21 (B3)
AR3L (C4)
AR4L (C3)
AR6L (C3)
AR6R (B3)
AR8 (D3)
AR9L (D3)
DR10 (G7)
DR12 (F7)
DR18 (F7)
DR20 (F7)
DR21 (G6)
DR22 (G6)
DR27 (G7)
DR28 (G7)
DR3 (F7)
DR35 (H6)
DR36 (I6)
DR39 (I5)
DR42 (I5)
DR44 (I6)
DR5 (H6)
DR7 (G7)
DR71 (J7)
DR72 (J6)
DR73 (J6)
DR8 (G7)
DX1 (I7)
FR1 (F5)
FR2 (H3)
FR4L (E4)
FR7L (F4)
FR7R (F4)
FR8R (G4)
HR1 (I3)
HR1L (H3)
HR1R (H3)
HR2 (H3)
HR2L (I4)
HR3 (I3)
HR5L (J4)
HR5R (I5)
HR6L (J5)
HR6R (J5)
OR12 (D5)
OR13 (C5)
OR17 (D5)
OR18 (D5)
OR2 (B4)
OR5 (B4)
OR6 (C5)
OR8 (D5)
PR1 (J3)
RR0 (E2)
RR1 (F2)
RR10 (E2)
RR11 (D3)
RR12 (F2)
RR15 (G2)
RR16 (G2)
RR17 (H1)
RR18 (E2)
RR19 (H1)
RR20 (H0)
RR21 (H0)
RR22 (H0)
RR23 (G1)
RR24 (G1)
RR26 (H1)
RR27 (G1)
RR28 (G0)
RR3 (F3)
RR4 (F2)
RR5 (G2)
RR6 (F3)
RR7 (G2)
RR8 (F2)
SR10 (C6)
SR11 (C5)
SR12 (B6)
SR13 (C6)
SR14 (B6)
SR15 (A5)
TR16 (D6)
TR17 (C6)
TR24 (C6)
TR25 (D6)
TR3 (B7)
TR32 (E7)
TR35 (F6)
TR37 (F6)
TR38 (D5)
TR39 (C6)
TR43 (C6)
TR45 (C6)
TR50 (D6)
TR52 (C6)
TR53 (D5)
TX1 (E6)
TX2 (D6)
VR3L (A5)
VR3R (A4)
VR4L (A5)
VR4R (A4)

*** CONDENSER ***

AC1L (E4)
AC1R (E3)
AC2 (D2)
AC22 (A3)
AC3 (D2)
AC3L (C4)
AC3R (C4)
AC4L (C4)
AC4R (C4)
AC5L (C3)
AC5R (B3)
AC6 (C2)
AC6L (A2)
AC6R (A1)
AC7 (B2)
AC7L (A2)
AC7R (A1)
AC8 (B2)
AC8L (A2)
AC8R (A1)
AC9 (B2)
AC9L (B2)
AC9R (B1)
DC0 (H6)
DC1 (G7)
DC10 (J6)
DC12 (H7)
DC13 (H7)
DC14 (H6)
DC15 (H7)
DC16 (H7)
DC18 (I7)
DC23 (I7)
DC3 (G7)
DC30 (J7)
DC31 (J7)
DC4 (G7)
DC5 (H6)
DC6 (H6)
DC7 (I6)
DC71 (J7)
FC1 (E4)
FC10L (F4)
FC10R (G4)
FC11L (G5)
FC11R (G5)
FC1L (E5)
FC1R (F5)
FC2 (E4)
FC2L (G5)
FC2R (F5)
FC3L (G4)
FC3R (G4)
FC4 (F5)
FC4L (F5)
FC4R (F5)
FC5 (G4)
FC5L (G5)
FC5R (G5)
FC6L (F4)
FC6R (F4)
FC7L (F4)
FC7R (G4)
FC8L (F4)
FC8R (G4)
FC9L (F4)
FC9R (G4)
HC1L (I4)
HC1R (I5)
HC2L (J4)
HC2R (J5)
HC4 (I5)
OC1 (C4)
OC13 (C5)
OC14 (C5)
OC16 (C5)
OC17 (B5)
OC18 (E5)
OC19 (D5)
OC2 (B4)
OC20 (D5)
OC3 (C5)
OC8 (D5)
OC9 (D5)
PC1 (K3)
PC2 (J3)
RC0 (I1)
RC12 (H1)
RC13 (H1)
RC14 (F1)
RC16 (E1)
RC17 (F1)
RC18 (H1)
RC19 (G1)
RC2 (G2)
RC3 (E2)
RC4 (G3)
RC5 (E2)
RC6 (G2)
TC10 (D7)
TC101 (C6)
TC102 (D7)
TC13 (E7)
TC15 (F7)
TC17 (F7)
TC18 (F7)
TC19 (F7)
TC20 (C7)
TC21 (C7)
TC22 (D6)
TC25 (E6)
TC29 (E6)
TC31 (E6)
TC32 (F6)
TC33 (F6)
TC39 (D6)
TC4 (D7)
TC40 (D6)
TC9 (D7)
VC1L (B4)
VC1R (B4)
VC3L (B5)
VC3R (B4)

*** DIODE ***

AD1 (D2)
AD10 (B3)
AD11 (B3)
AD2 (D3)
AD3 (D3)
AD4 (E3)
AD5 (E3)
AD6 (B3)
AZD1 (B2)
AZD2 (B3)
DZD1 (I7)
FD1 (F5)
FZD1 (F5)
HD1 (I3)
HD2 (I3)
HD3 (I5)
HD4 (J4)
HD5 (J4)
HD6 (I3)
OD1 (C4)
OD2 (B5)
OD3 (C6)
OD4 (C6)
OZD1 (B4)
RD1 (F2)
RD2 (F2)
RD3 (F3)
RD4 (G1)
RD5 (F1)
RD6 (G1)
RD7 (I3)
RZD2 (G2)
RZD3 (H1)
RZD4 (G1)
SD1 (C6)
SD2 (C6)
SD3 (B6)
SD4 (A5)
SD5 (A6)
TD1 (A7)
TD2 (A7)
TD3 (B7)
TD4 (A7)
TD7 (F6)
TD8 (F6)
VD1 (A4)
VD2 (A4)

*** TR ***

AQ1 (D2)
AQ10 (A3)
AQ11 (A3)
AQ1L (D4)
AQ1R (D3)
AQ3 (D3)
AQ4 (D3)
AQ5 (D2)
AQ6 (D3)
AQ7 (E2)
AQ8L (D4)
AQ8R (D3)
DQ1 (G6)
DQ2 (G5)
DQ3 (G5)
DQ4 (J7)
FQ1 (G4)
FQ1L (F4)
FQ1R (E4)
HQ1L (I4)
HQ1R (I5)
OQ1 (D4)
OQ2 (C4)
OQ3 (D4)
OQ4 (C6)
OQ5 (C5)
RQ10 (H2)
RQ12 (I1)
RQ4 (F3)
RQ5 (F3)
RQ7 (F2)
RQ8 (G2)
SQ10 (A5)
SQ8 (C5)
SQ9 (B5)
TQ1 (A6)
TQ2 (C7)
TQ3 (D7)
TQ4 (D7)
TQ5 (B6)
TQ6 (C6)
TQ7 (C6)

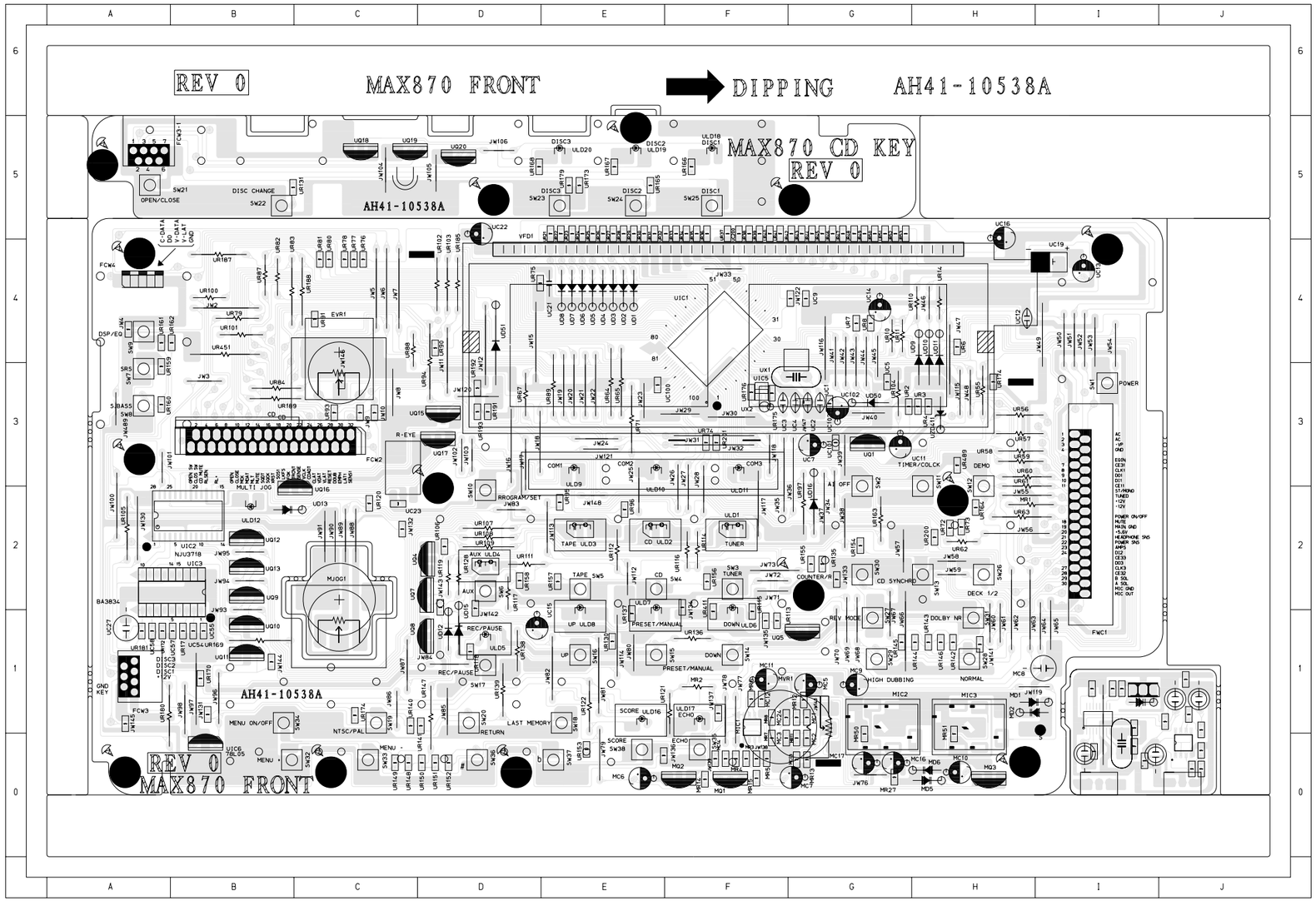
*** IC&WAFER ***

AJ2 (A3)
FWA1 (H7)
HJ1 (K5)
PJ1 (K3)
VWA1 (G4)

*** CHIP ***

AC1 (D3)
AC2L (C4)
AC2R (C4)
AR1 (D3)
AR16R (D3)
AR22 (B3)
AR23 (A3)
AR2L (D4)
AR2R (D3)
AR3R (D3)
AR4R (C3)
AR5 (D3)
AR5L (C3)
AR5R (C3)
AR6 (D3)
AR7 (D3)
AR9 (D3)
AR9R (D3)
DC11 (I6)
DC17 (I6)
DC18 (H6)
DC19 (H6)
DC2 (F6)
DC20 (H6)
DC21 (H6)
DC22 (H6)
DC24 (I7)
DC25 (I7)
DC26 (H7)
DC27 (H7)
DC28 (H7)
DC29 (H7)
DC32 (I7)
DC33 (I7)
DC8 (I6)
DC9 (I6)
DIC1 (I7)
DIC3 (G7)
DIC4 (I6)
DIC5 (J7)
DR0 (G6)
DR1 (G6)
DR11 (G6)
DR13 (G6)
DR14 (G6)
DR15 (G6)
DR16 (G6)
DR17 (G6)
DR19 (G6)
DR2 (G6)
DR23 (G7)
DR24 (G7)
DR25 (G6)
DR26 (G7)
DR29 (G7)
DR30 (G6)
DR31 (G6)
DR32 (G6)
DR33 (G6)
DR34 (G6)
DR37 (I6)
DR38 (I6)
DR4 (G7)
DR40 (I6)
DR41 (I6)
DR45 (I6)
DR46 (I6)
DR47 (I6)
DR48 (I6)
DR49 (I7)
DR50 (J7)
DR51 (J7)
DR52 (J7)
DR53 (I7)
DR54 (I7)
DR55 (I6)
DR56 (I6)
DR57 (I7)
DR6 (G7)
DR74 (I7)
DR9 (G7)
FC11L (E4)
FC11R (E4)
FIC1 (E4)
FR10L (F4)
FR10R (F4)
FR1L (E4)
FR1R (E4)
FR2L (E5)
FR2R (E4)
FR3L (E4)
FR3R (E4)
FR4R (E4)
FR5L (F4)
FR5R (F4)
FR6L (F4)
FR6R (F4)
FR8L (F4)
FR9L (F4)
FR9R (G4)
HC3 (J4)
HIC1 (J5)
HR2R (I5)
HR3L (I4)
HR3R (I5)
HR4L (I4)
HR4R (I5)
J1 (A6)
J10 (E7)
J11 (G6)
J12 (E5)
J13 (F5)
J14 (F4)
J15 (F3)
J16 (F3)
J17 (D3)
J2 (A6)
J22 (H7)
J23 (H6)
J24 (I7)
J25 (I7)
J27 (C5)
J28 (D5)
J280 (I6)
J29 (G5)
J3 (A7)
J30 (E7)
J31 (E6)
J4 (B7)
J5 (A6)
J6 (A6)
J7 (B6)
J8 (B6)
J9 (D6)
OC10 (C5)
OC12 (C5)
OC15 (C5)
OC4 (C5)
OC5 (C5)
OC6 (C5)
OC7 (C5)
OIC1 (D5)
OR1 (D4)
OR10 (C5)
OR11 (B5)
OR14 (C5)
OR16 (C5)
OR3 (D5)
OR4 (C4)
OR7 (C5)
OR9 (C5)
RR13 (F2)
RR2 (F3)
RR9 (F2)
TC1 (B7)
TC100 (B7)
TC11 (E7)
TC12 (E7)
TC14 (E7)
TC16 (F7)
TC17 (B7)
TC2 (C7)
TC23 (E6)
TC24 (E6)
TC26 (E6)
TC27 (E6)
TC28 (F6)
TC3 (C7)
TC30 (F6)
TC34 (G5)
TC35 (G5)
TC37 (C6)
TC38 (C6)
TC41 (D6)
TC42 (D6)
TC5 (C7)
TC6 (B7)
TC8 (D7)
TR1 (B7)
TR10 (C7)
TR11 (C7)
TR12 (D7)
TR13 (D7)
TR14 (D7)
TR15 (D7)
TR18 (B7)
TR19 (B6)
TR2 (B7)
TR20 (B6)
TR21 (C6)
TR22 (C6)
TR23 (C6)
TR26 (D7)
TR27 (E7)
TR28 (E7)
TR29 (E7)
TR30 (E7)
TR31 (F7)
TR33 (F7)
TR34 (F5)
TR36 (G5)
TR4 (A6)
TR40 (C6)
TR41 (C6)
TR42 (C6)
TR44 (C6)
TR46 (D6)
TR47 (D6)
TR48 (D6)
TR49 (D6)
TR5 (C7)
TR50 (D6)
TR51 (C6)
TR6 (C7)
TR7 (C7)
TR8 (C7)
TR9 (D7)
VC2L (A4)
VC2R (A4)
VR1L (A4)
VR1R (A4)
VR2L (A4)
VR2R (A4)
j18 (B7)
j19 (B7)
j20 (B7)
j21 (C7)

# 10-2 Front




### XXX RESISTOR XXX

MR1 (H2)
MR2 (F1)
UR10 (G4)
UR100 (B4)
UR101 (B4)
UR102 (D4)
UR103 (D4)
UR104 (G3)
UR105 (A2)
UR107 (D2)
UR108 (D2)
UR109 (D2)
UR11 (G4)
UR110 (H4)
UR111 (D2)
UR112 (E2)
UR114 (F2)
UR116 (F2)
UR117 (D2)
UR119 (D2)
UR121 (F0)
UR122 (E1)
UR128 (D2)
UR136 (F1)
UR138 (D1)
UR139 (D1)
UR14 (H4)
UR147 (D0)
UR163 (G2)
UR169 (B1)
UR180 (A0)
UR185 (D4)
UR187 (B4)
UR188 (C4)
UR189 (B3)
UR451 (B4)
UR55 (H3)
UR56 (H3)
UR57 (H3)
UR58 (H3)
UR59 (H3)
UR60 (H3)
UR61 (H3)
UR62 (H2)
UR63 (H2)
UR64 (E3)
UR65 (E3)
UR67 (D3)
UR71 (E3)
UR79 (B4)
UR82 (B4)
UR83 (B4)
UR84 (B3)
UR87 (B4)
UR88 (C3)
UR89 (E3)
UR94 (D3)
UR97 (G2)
UX1 (F3)
UX2 (F3)

### XXX CONDENSER XXX

MC10 (H0)
MC11 (F1)
MC16 (G0)
MC17 (G0)
MC5 (G1)
MC6 (E0)
MC7 (F0)
MC8 (I1)
MC9 (G1)
UC1 (G3)
UC102 (G3)
UC11 (G3)
UC12 (H4)
UC13 (I4)
UC14 (G4)
UC15 (D1)
UC16 (H5)
UC19 (I4)
UC2 (G3)
UC21 (E4)
UC22 (D5)
UC27 (A1)
UC3 (F3)
UC4 (G3)
UC7 (G3)

### XXX DIODE XXX

MD1 (I1)
MD2 (H1)
MD5 (H0)
MD6 (H0)
UD1 (E4)
UD10 (H4)
UD11 (H4)
UD12 (D1)
UD13 (C2)
UD15 (D2)
UD16 (G3)
UD2 (E4)
UD3 (E4)
UD4 (E4)
UD5 (E4)
UD50 (G3)
UD51 (D4)
UD6 (E4)
UD7 (E4)
UD8 (E4)
UD9 (H4)
UZD411 (H3)

### XXX TR XXX

MQ1 (F0)
MQ2 (F0)
MQ3 (H0)
UIC6 (B0)
UQ1 (G3)
UQ10 (B1)
UQ11 (B1)
UQ12 (B2)
UQ13 (B2)
UQ15 (D3)
UQ16 (B2)
UQ17 (D3)
UQ18 (C5)
UQ19 (D5)
UQ20 (D5)
UQ4 (D2)
UQ5 (G1)
UQ7 (D2)
UQ8 (D1)
UQ9 (B2)

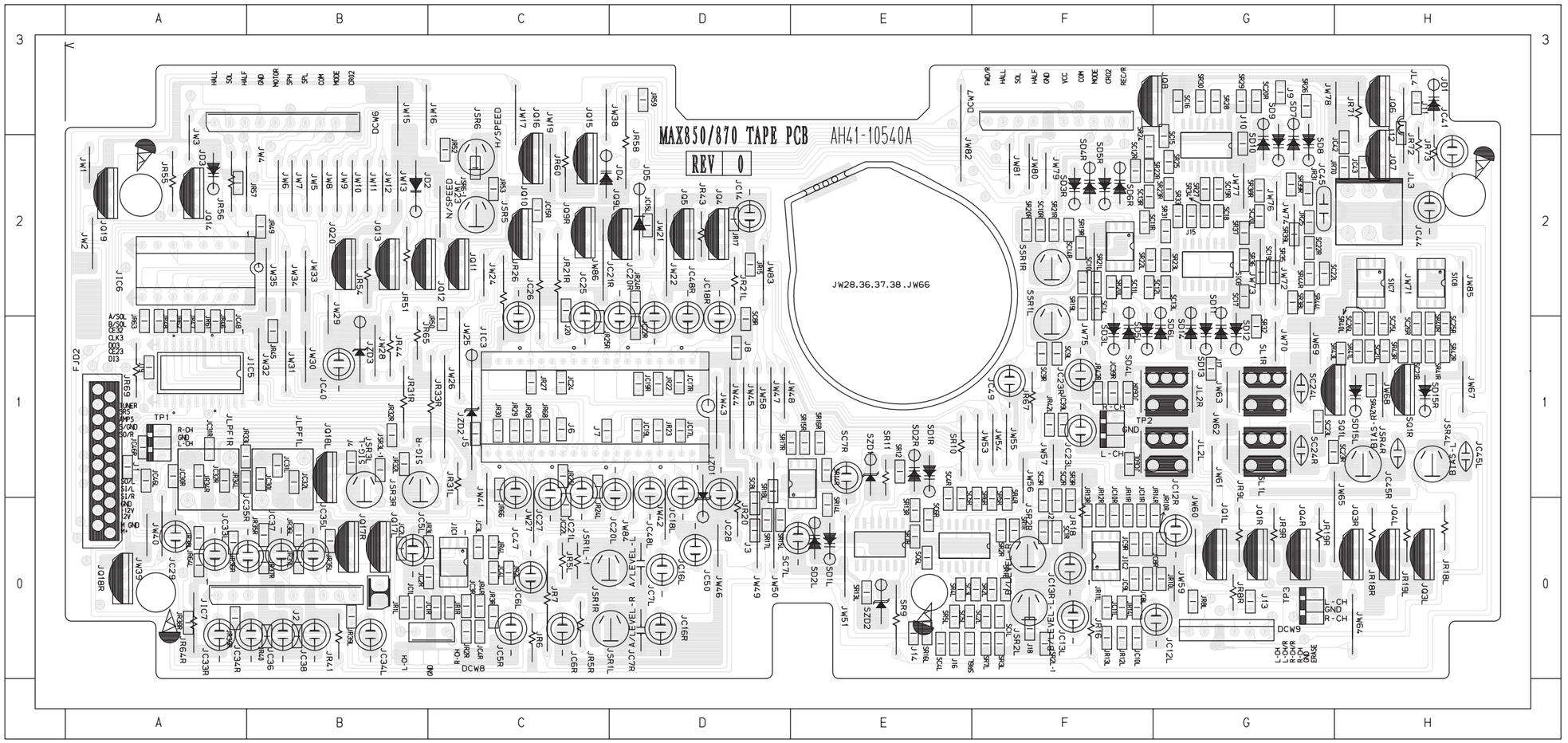
### XXX IC&WAFER XXX

FCW4 (A4)
UIC3 (B2)

### XXX CHIP XXX

JW10 (C3)
JW122 (G4)
JW131 (B1)
JW132 (C2)
JW133 (G2)
JW134 (F2)
JW135 (F1)
JW136 (E0)
JW137 (F1)
JW138 (F0)
JW139 (F0)
JW140 (G1)
JW141 (H1)
JW142 (D2)
JW143 (D2)
JW144 (B1)
JW145 (A1)
JW146 (C3)
JW147 (G3)
JW4 (A4)
JW9 (C3)
MC1 (G1)
MC12 (F1)
MC13 (G0)
MC14 (F0)
MC2 (G0)
MC24 (F1)
MC3 (F0)
MIC1 (F1)
MR11 (G0)
MR12 (G1)
MR13 (G0)
MR14 (F0)
MR15 (F0)
MR27 (G0)
MR3 (F0)
MR4 (F0)
MR5 (F0)
MR50 (G0)
MR51 (H0)
MR6 (F1)
MR7 (F0)
MR8 (F1)
UC100 (E3)
UC101 (G3)
UC103 (G3)
UC200 (F5)
UC23 (C2)
UC5 (G3)
UC54 (B1)
UC55 (B1)
UC57 (B1)
UC58 (A1)
UC9 (G4)
UIC2 (B2)
UIC5 (F3)
UR106 (D2)
UR113 (F1)
UR115 (F1)
UR118 (D1)
UR120 (C2)
UR130 (E1)
UR131 (B5)
UR135 (G2)
UR137 (E1)
UR140 (C1)
UR141 (D1)
UR142 (H1)
UR143 (H1)
UR144 (H1)
UR145 (G1)
UR146 (H1)
UR148 (C0)
UR149 (C0)
UR150 (D0)
UR151 (D0)
UR152 (D0)
UR153 (E0)
UR154 (G2)
UR155 (G2)
UR156 (F2)
UR157 (E2)
UR158 (D2)
UR159 (A3)
UR160 (A3)
UR161 (A4)
UR162 (B4)
UR164 (H2)
UR165 (E5)
UR166 (F5)
UR167 (E5)
UR168 (D5)
UR17 (B1)
UR170 (B1)
UR172 (A1)
UR173 (E5)
UR174 (H3)
UR174 (C1)
UR175 (F3)
UR176 (F3)
UR179 (E5)
UR181 (A1)
UR191 (D3)
UR192 (D3)
UR193 (D3)
UR2 (G3)
UR200 (H2)
UR201 (F3)
UR21 (E5)
UR22 (E5)
UR23 (E5)
UR24 (E5)
UR25 (E5)
UR26 (E5)
UR27 (E5)
UR28 (E5)
UR29 (E5)
UR3 (H3)
UR30 (E5)
UR31 (E5)
UR32 (F5)
UR33 (F5)
UR34 (F5)
UR35 (F5)
UR36 (F5)
UR37 (F5)
UR38 (F5)
UR39 (F5)
UR4 (H3)
UR40 (F5)
UR41 (F5)
UR411 (F1)
UR42 (G5)
UR43 (G5)
UR44 (G5)
UR45 (G5)
UR46 (G5)
UR47 (G5)
UR48 (G5)
UR489 (H3)
UR49 (G5)
UR50 (G5)
UR51 (G5)
UR52 (G5)
UR53 (G5)
UR6 (H4)
UR7 (G4)
UR72 (H2)
UR73 (H2)
UR74 (F3)
UR75 (D4)
UR76 (C4)
UR77 (C4)
UR78 (C4)
UR8 (G4)
UR80 (C4)
UR81 (C4)
UR90 (D4)
UR91 (C4)
UR93 (C3)
UR95 (E2)
UR96 (E2)

# 10-3 Deck




*** RESISTOR ***

JR16 (F0) JR9L (G0)
JR18 (F0) JR9R (G0)
JR18L (H0) JSR1L-1 (C0)
JR18R (H0) SR10 (E1)
JR19L (H0) SR11 (E1)
JR19R (G0) SR9 (E0)
JR20 (D0)
JR21L (D2)
JR21R (C1)
JR26 (C1)
JR31L (C0)
JR31R (B1)
JR33R (C1)
JR41 (B0)
JR43 (D2)
JR44 (B1)
JR51 (B2)
JR54 (B2)
JR55 (A2)
JR56 (A2)
JR58 (D2)
JR5L (C0)
JR5R (C0)
JR6 (C0)
JR60 (C2)
JR64R (A0)
JR65 (B1)
JR67 (F1)
JR69 (A1)
JR7 (C0)
JR71 (H2)
JR72 (H2)
JR73 (H2)
JR8R (G0)

*** CONDENSER ***

JC12L (G0) JC47 (C1)
JC12R (G0) JC48L (D1)
JC13L (F0) JC48R (D1)
JC13R (F0) JC49 (F1)
JC14 (D2) JC50 (D0)
JC16L (D0) JC5L (B0)
JC16R (D0) JC5R (C0)
JC18L (D1) JC6L (C0)
JC18R (D1) JC6R (C0)
JC20L (D0) JC7L (D0)
JC20R (D1) JC7R (D0)
JC21L (C1) SC24L (G1)
JC23L (F1) SC24R (G1)
JC23R (F1) SC7L (E0)
JC25 (C2) SC7R (E1)
JC26 (C1)
JC27 (C1)
JC28 (D0)
JC29 (A0)
JC33L (A0)
JC33R (A0)
JC34L (B0)
JC34R (B0)
JC35L (B0)
JC35R (B0)
JC36 (B0)
JC37 (B0)
JC3B (B0)
JC40 (B1)
JC41 (H2)
JC44 (H2)
JC45 (G2)
JC45L (H1)
JC45R (H1)

*** DIODE ***

JD1 (H3)
JD2 (B2)
JD3 (A2)
JD4 (C2)
JD5 (D2)
JZD1 (D0)
JZD2 (C1)
JZD3 (B1)
SD10 (G3)
SD11 (G2)
SD12 (G1)
SD13 (G1)
SD14 (G2)
SD15L (H1)
SD15R (H1)
SD1L (E0)
SD1R (E1)
SD2L (E0)
SD2R (E1)
SD3L (F1)
SD3R (F2)
SD4L (F2)
SD4R (F2)
SD5L (F1)
SD5R (F2)
SD6L (G2)
SD6R (F2)
SD7 (G3)
SD8 (G2)
SD9 (G2)
SZD1 (E1)
SZD2 (E0)

*** TR ***

JQ10 (C2)
JQ11 (C2)
JQ12 (B2)
JQ13 (B2)
JQ14 (A2)
JQ15 (C2)
JQ16 (C2)
JQ17L (B0)
JQ17R (B0)
JQ18L (B1)
JQ18R (A0)
JQ19 (A2)
JQ1L (G0)
JQ1R (G0)
JQ20 (B2)
JQ3L (H0)
JQ3R (H0)
JQ4 (D2)
JQ4L (H0)
JQ4R (G0)
JQ5 (D2)
JQ6 (H3)
JQ7 (H2)
JQ8 (F3)
JQ9L (D2)
JQ9R (C2)
SQ1L (H1)
SQ1R (H1)

*** IC&WAFER ***

DCW6 (A3)
DCW7 (F3)
DCW8 (C0)
DCW9 (G0)
FJD2 (A0)
J1C3 (D1)
J1C6 (B2)
J1C7 (A0)
TP1 (A1)
TP2 (F1)
TP3 (G0)

*** CHIP ***

J1 (A1)
J10 (G2)
J11 (H3)
J12 (H3)
J13 (G0)
J14 (E0)
J15 (G2)
J16 (E0)
J17 (G1)
J18 (F0)
J19 (A1)
J2 (B0)
J20 (C2)
J21 (F0)
J3 (D0)
J4 (B1)
J5 (C1)
J6 (C1)
J7 (C1)
J8 (D1)
J9 (G3)
JC10L (F0)
JC10R (F0)
JC11L (F0)
JC11R (F0)
JC15L (D2)
JC15R (C2)
JC17L (D1)
JC17R (D1)
JC19L (D1)
JC19R (D1)
JC1L (B0)
JC1R (C0)
JC22L (C0)
JC22R (D1)
JC24 (C1)
JC2L (B0)
JC2R (C0)
JC30L (B1)
JC30R (A1)
JC31L (B1)
JC31R (A1)
JC32L (B1)
JC32R (A1)
JC39L (F1)
JC39R (F1)
JC3L (C0)
JC3R (C0)
JC42 (H2)
JC43 (H2)
JC46L (A1)
JC46R (A1)
JC4B (A1)
JC4L (C0)
JC4R (C0)
JC60L (F1)
JC60R (F1)
JC8L (F0)
JC8R (F0)
JC9L (F0)
JC9R (F0)
J1C1 (C0)
J1C2 (F0)
J1C5 (A1)
JR10L (G0)
JR10R (G0)
JR11L (F0)
JR11R (F0)
JR12L (F0)
JR12R (F0)
JR13L (F0)
JR13R (F0)
JR14L (F0)
JR14R (G0)
JR15 (D2)
JR17 (D2)
JR1L (B0)
JR1R (C0)
JR22 (D1)
JR23 (D1)
JR24L (C1)
JR24R (D2)
JR25 (G2)
JR25L (C1)
JR25R (C1)
JR27 (C1)
JR28 (C1)
JR29 (C1)
JR2L (C0)
JR2R (C0)
JR30 (C1)
JR31 (G2)
JR32L (B1)
JR32R (B1)
JR33L (A1)
JR33R (A1)
JR34L (A1)
JR34R (A1)
JR35L (B0)
JR35R (B0)
JR36L (B0)
JR36R (A0)
JR37L (B0)
JR37R (B0)
JR38L (A0)
JR38R (A0)
JR39L (B0)
JR39R (A0)
JR3L (C0)
JR3R (C0)
JR40 (B0)
JR42L (F1)
JR42R (F1)
JR45 (B1)
JR46 (A1)
JR47 (A1)
JR48 (A1)
JR49 (B2)
JR4L (C0)
JR4R (C0)
JR50 (C1)
JR52 (C2)
JR53 (C2)
JR57 (A2)
JR59 (D3)
JR61 (A1)
JR62 (A1)
JR63 (A1)
JR64L (A0)
JR66 (C1)
JR68 (C1)
JR70 (H2)
JR8L (G0)
JSR2L-1 (F0)
JSR3L-1 (B1)
JSR6-1 (C2)
SC10L (F2)
SC10R (F2)
SC11L (F2)
SC11R (F2)
SC12L (F2)
SC12R (F2)
SC13L (G2)
SC13R (F2)
SC14 (F2)
SC14R (F2)
SC15 (G2)
SC16 (G3)
SC17 (G2)
SC18 (G2)
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SC19R (G2)
SC1L (F0)
SC1R (F0)
SC20L (G2)
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SC21L (H1)
SC21R (H1)
SC22L (G2)
SC22R (G2)
SC23L (G1)
SC23R (G1)
SC25L (H1)
SC25R (H1)
SC26L (H1)
SC26R (H1)
SC2L (F0)
SC2R (F0)
SC3L (F0)
SC3R (F0)
SC4L (E0)
SC4R (E0)
SC5L (E0)
SC5R (E0)
SC6L (E0)
SC6R (E0)
SC8L (D0)
SC8R (D1)
SC9L (F1)
SC9R (F1)
SR12 (E1)
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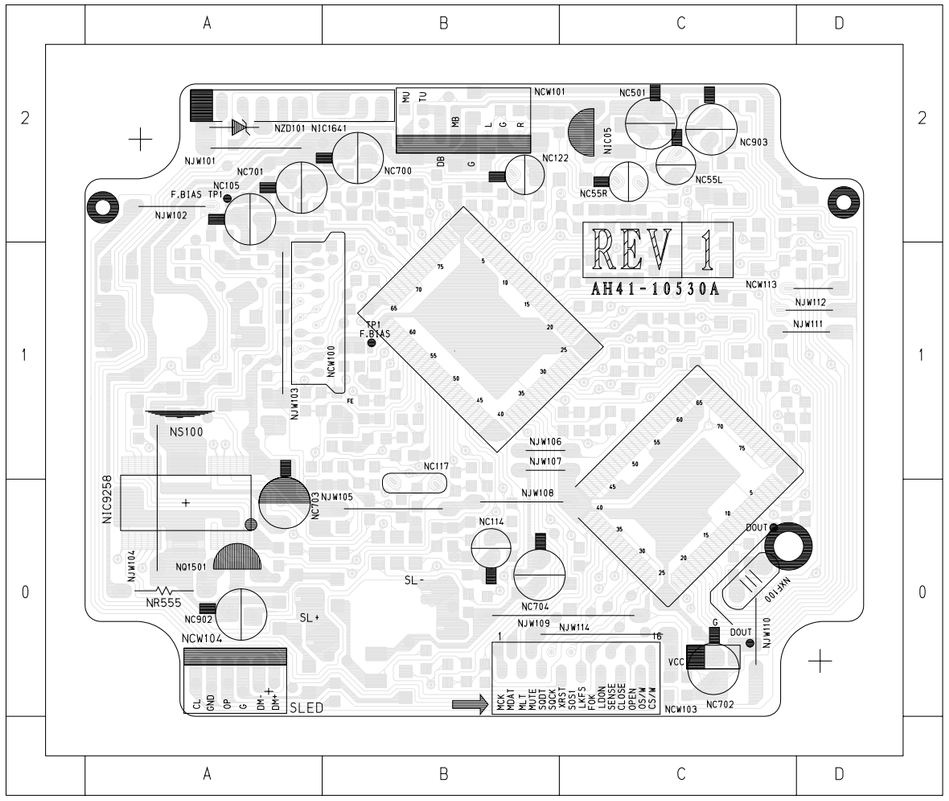
SR13R (E0)
SR14L (E0)
SR14R (E1)
SR15L (D0)
SR15R (E1)
SR16L (E0)
SR16R (E1)
SR17L (D0)
SR17R (E1)
SR18L (D1)
SR18R (F1)
SR19L (F2)
SR19R (F2)
SR1L (F0)
SR1R (F0)
SR20L (F2)
SR20R (F2)
SR21L (F2)
SR21R (F2)
SR22L (F2)
SR22R (F2)
SR23L (G2)
SR23R (G2)
SR24 (F2)
SR25 (G2)
SR26 (G3)
SR27 (G2)
SR28 (G3)
SR29 (G3)
SR2L (F0)
SR2R (F0)
SR30 (G3)
SR31 (G2)
SR32 (G1)
SR33 (G2)
SR34 (G2)
SR35 (G2)
SR36 (G2)
SR37 (G2)
SR38L (G2)
SR38R (G2)
SR39L (G2)
SR39R (G2)
SR3L (F0)
SR3R (F0)
SR40L (H1)
SR40R (H1)
SR41L (H1)
SR41R (H1)
SR42L (H1)
SR42R (H1)
SR43L (H1)
SR43R (H1)
SR44L (G2)
SR44R (G2)
SR4L (E0)
SR4R (F0)
SR5L (E0)
SR5R (F0)
SR6L (E0)
SR6R (F0)
SR7L (F0)
SR7R (E0)

# 10-4 CD

## 10-4-1 Main




*** CHIP ***

IC9223 (B1)
IC9258 (A0)
IC9286 (B0)
NC100 (B2)
NC101 (B2)
NC102 (B2)
NC103 (B2)
NC104 (A1)
NC106 (B2)
NC107 (B1)
NC108 (B1)
NC110 (B1)
NC111 (B1)
NC112 (B1)
NC113 (B1)
NC115 (B0)
NC116 (B0)
NC117 (B2)
NC118 (B0)
NC119 (B1)
NC120 (C1)
NC121 (C1)
NC124 (C1)
NC125 (C1)
NC190 (A2)
NC200 (D1)
NC2000 (B2)
NC201 (C0)
NC202 (C0)
NC203 (C0)
NC204 (C1)
NC205 (C1)
NC300 (C2)
NC301 (B2)
NC400 (C2)
NC500 (A2)
NC502 (C2)
NC50L (C1)
NC50R (C1)
NC52L (C1)
NC52R (C2)
NC53L (C1)
NC53R (C2)
NC54L (D1)
NC54R (C1)
NC602 (B0)
NC603 (B1)
NC800 (B0)
NC804 (B1)
NC901 (C0)
NC902 (C0)
NC903 (B1)
NC904 (A1)
NC905 (B0)
ND200 (C2)
ND201 (C2)
NJR102 (B2)
NJR103 (A2)
NJR104 (A2)
NJR105 (C1)
NJR106 (C1)
NJR107 (C1)
NJR108 (C1)
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NJR132 (B2)
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NJR135 (A1)
NJR136 (A1)
NJR137 (A1)
NJR138 (A1)
NJR139 (A1)
NJR140 (A1)
NJR141 (A1)
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NJR145 (B0)
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NJR153 (C0)
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NJR155 (C1)
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NJR300 (C1)
NJR301 (C2)
NJR302 (C2)
NJR303 (C2)
NJR304 (C2)
NJR305 (C2)
NJR306 (C1)
NJR307 (C2)
NJR308 (B2)
NJW320 (B2)
NL100 (B0)
NL300 (D2)
NL301 (C2)
NL302 (B2)
NL303 (A0)
NQ1502 (A1)
NR100 (B2)
NR101 (A1)
NR102 (A1)
NR103 (B1)
NR103 (B1)
NR104 (B0)
NR105 (B0)
NR106 (B0)
NR107 (B1)
NR108 (B1)
NR109 (B1)
NR111 (B0)
NR112 (B0)
NR113 (C1)
NR114 (C1)
NR115 (C1)
NR116 (B2)
NR117 (B2)
NR118 (B1)
NR119 (C1)
NR120 (B2)
NR121 (B2)
NR200 (C1)
NR201 (C0)
NR202 (C1)
NR203 (C1)
NR204 (C1)
NR300 (C1)
NR400 (B0)
NR401 (B1)
NR50L (C1)
NR50R (C2)
NR52L (C1)
NR52R (C2)
NR53L (C1)
NR53R (C2)
NR54L (C1)
NR54R (C2)
NR55L (C1)
NR55R (C2)
NR56L (D1)
NR56R (D1)
NR57L (B2)
NR57R (C2)
NR601 (B1)
NR602 (B1)
NR603 (B1)
NR604 (B1)
NR606 (B0)
NR804 (B0)

*** CONDENSER ***

NC105 (A2)
NC114 (B0)
NC117 (B0)
NC122 (B2)
NC501 (C2)
NC55L (C2)
NC55R (C2)
NC700 (B2)
NC701 (A2)
NC702 (C0)
NC703 (A0)
NC704 (B0)
NC902 (A0)
NC903 (C2)

*** RESISTOR ***

NR555 (A0)

*** DIODE ***

NZD101 (A2)

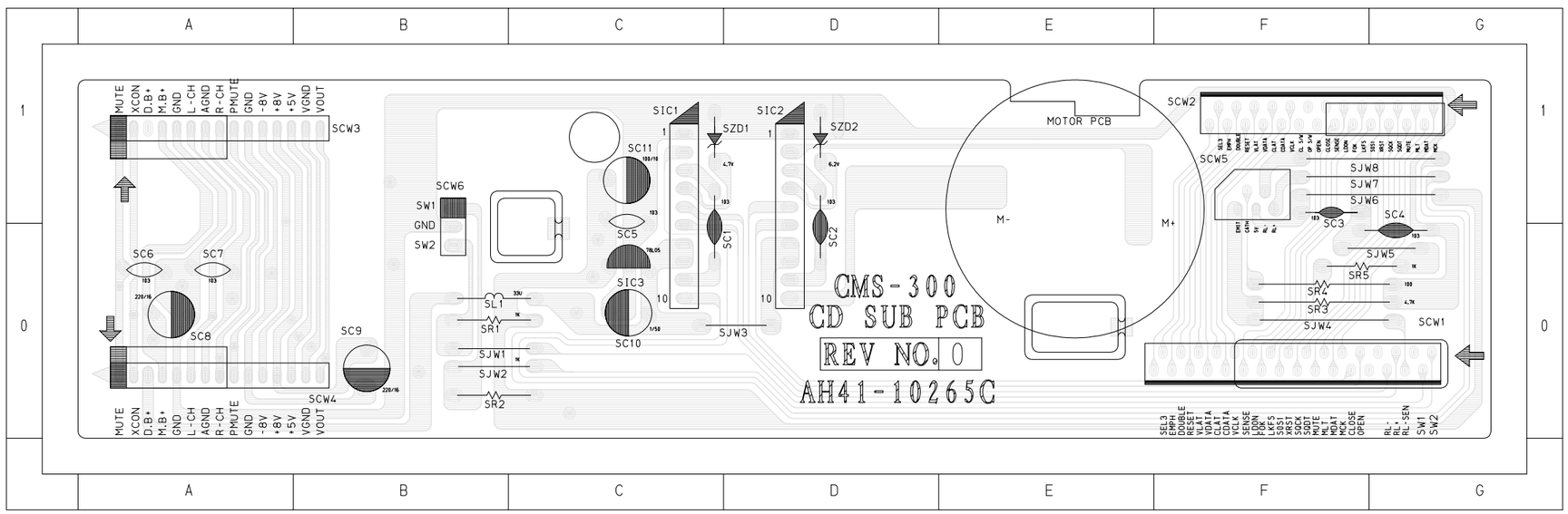
*** TR ***

NIC05 (C2)
NQ1501 (A0)

*** IC&WAFER ***

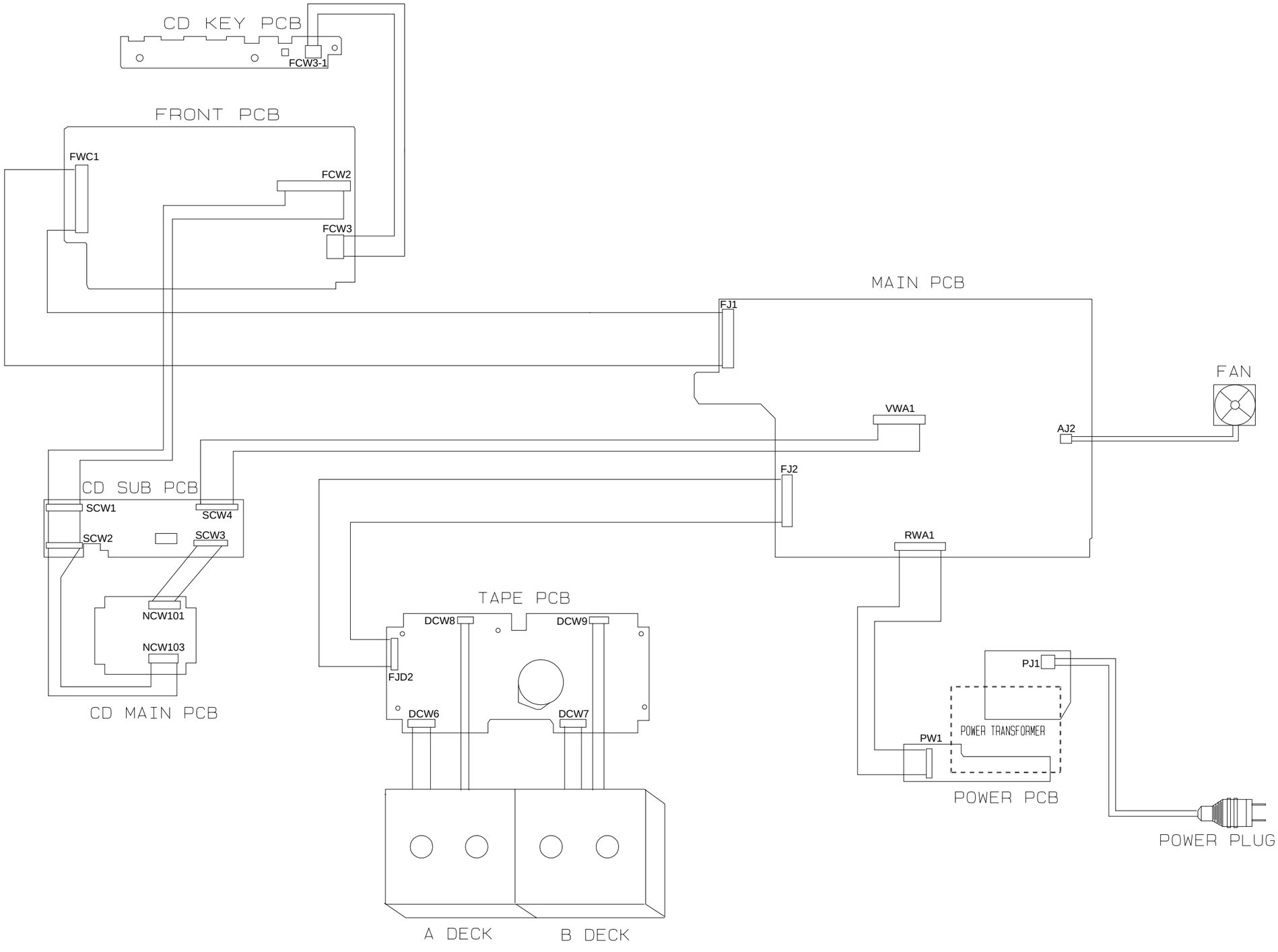
NCW101 (B2)
NCW104 (A0)
NIC1641 (A2)

## 10-4-2 SUB



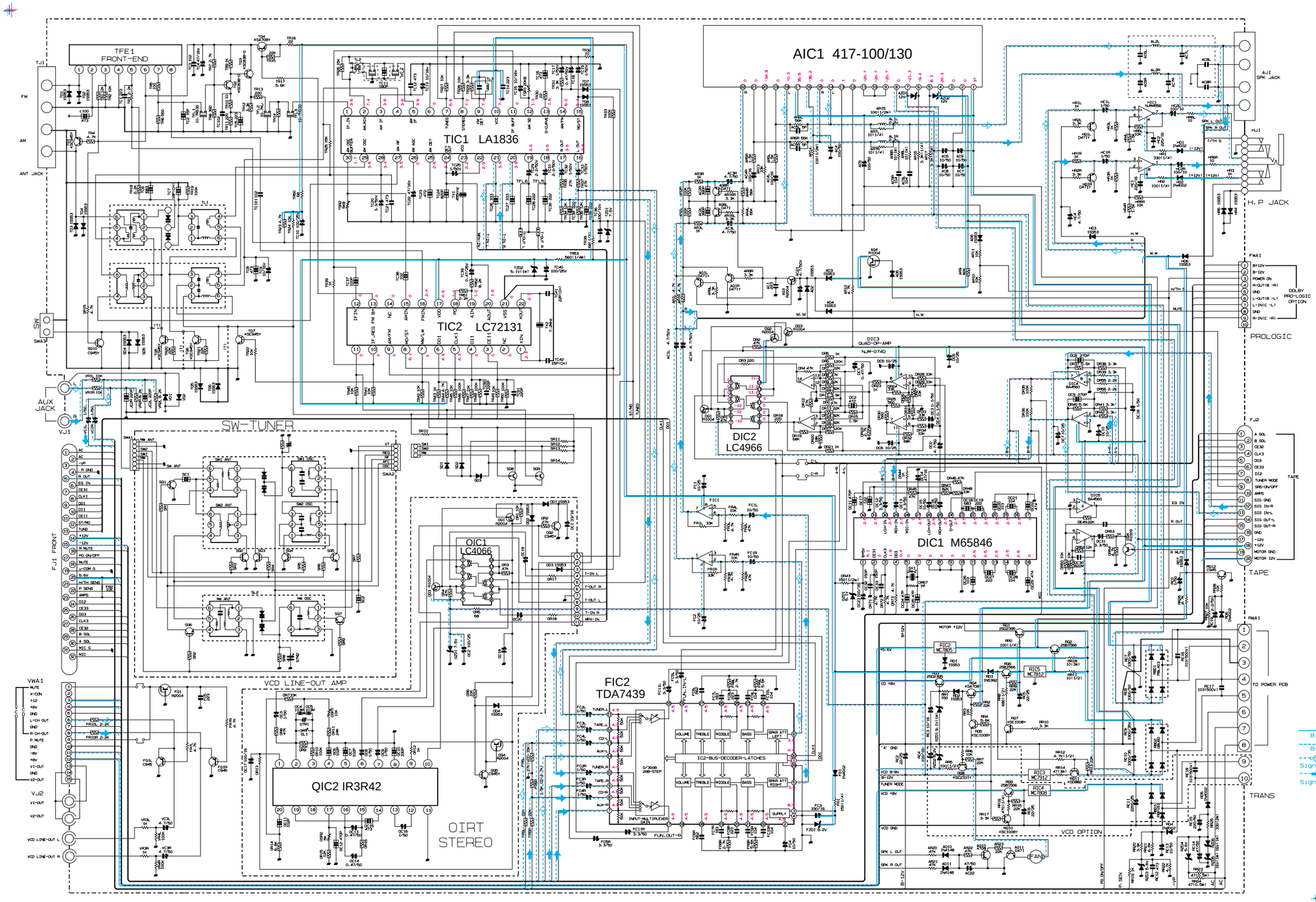

| *** RESISTOR *** | *** CONDENSER *** | *** DIODE *** | *** TR *** |
|---|---|---|---|
| SR1 (B0) | SC1 (C0) | SZD1 (C1) | SIC3 (C0) |
| SR2 (B0) | SC10 (C0) | SZD2 (D1) | |
| SR3 (F0) | SC11 (C1) | | |
| SR4 (F0) | SC2 (D0) | | |
| SR5 (F0) | SC3 (F1) | | |
| | SC4 (F0) | | |
| | SC5 (C1) | | |
| | SC6 (A0) | | |
| | SC7 (A0) | | |
| | SC8 (A0) | | |
| | SC9 (B0) | | |

# 11. Wiring Diagram

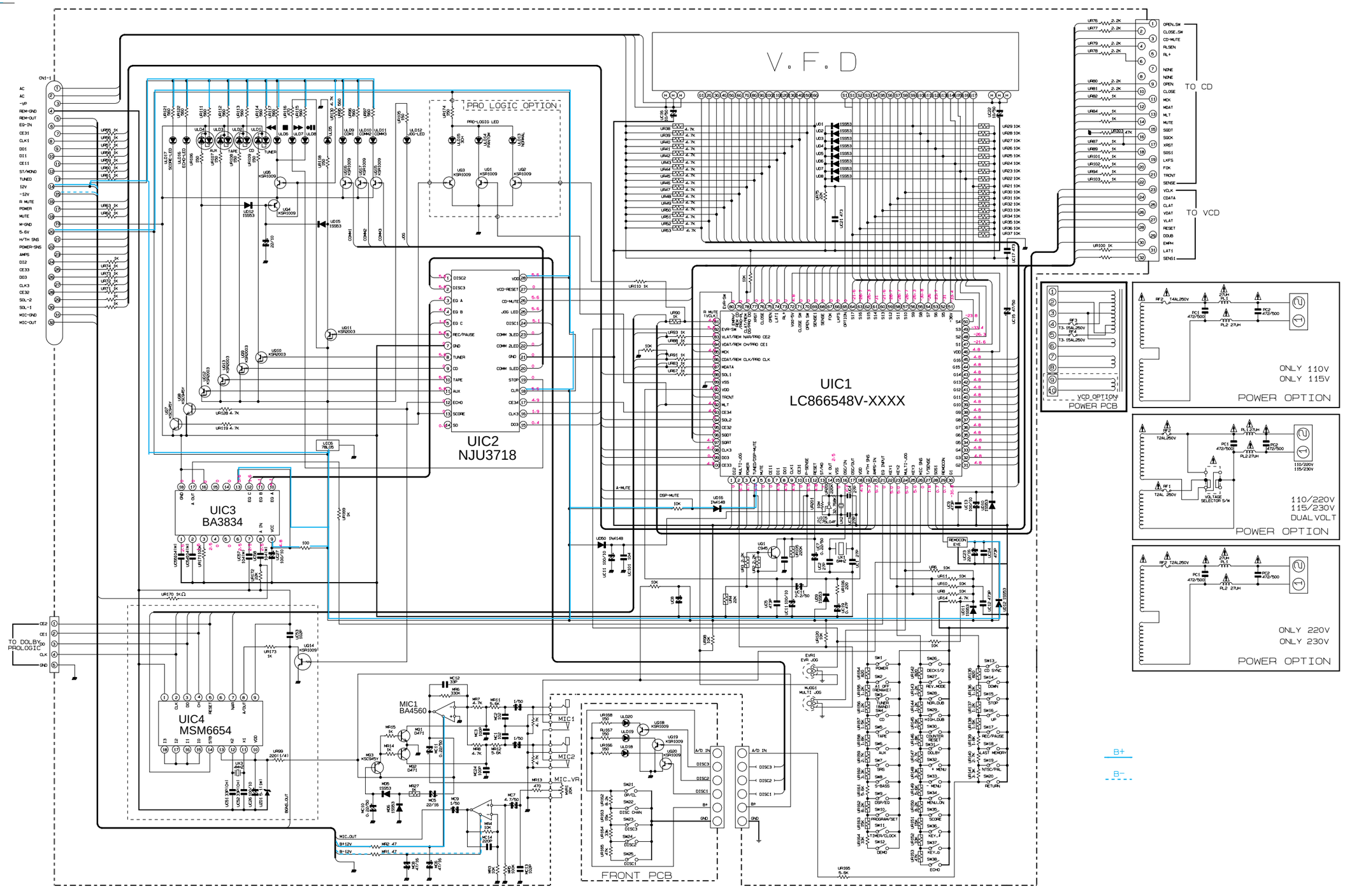


# 12. Schematic Diagrams

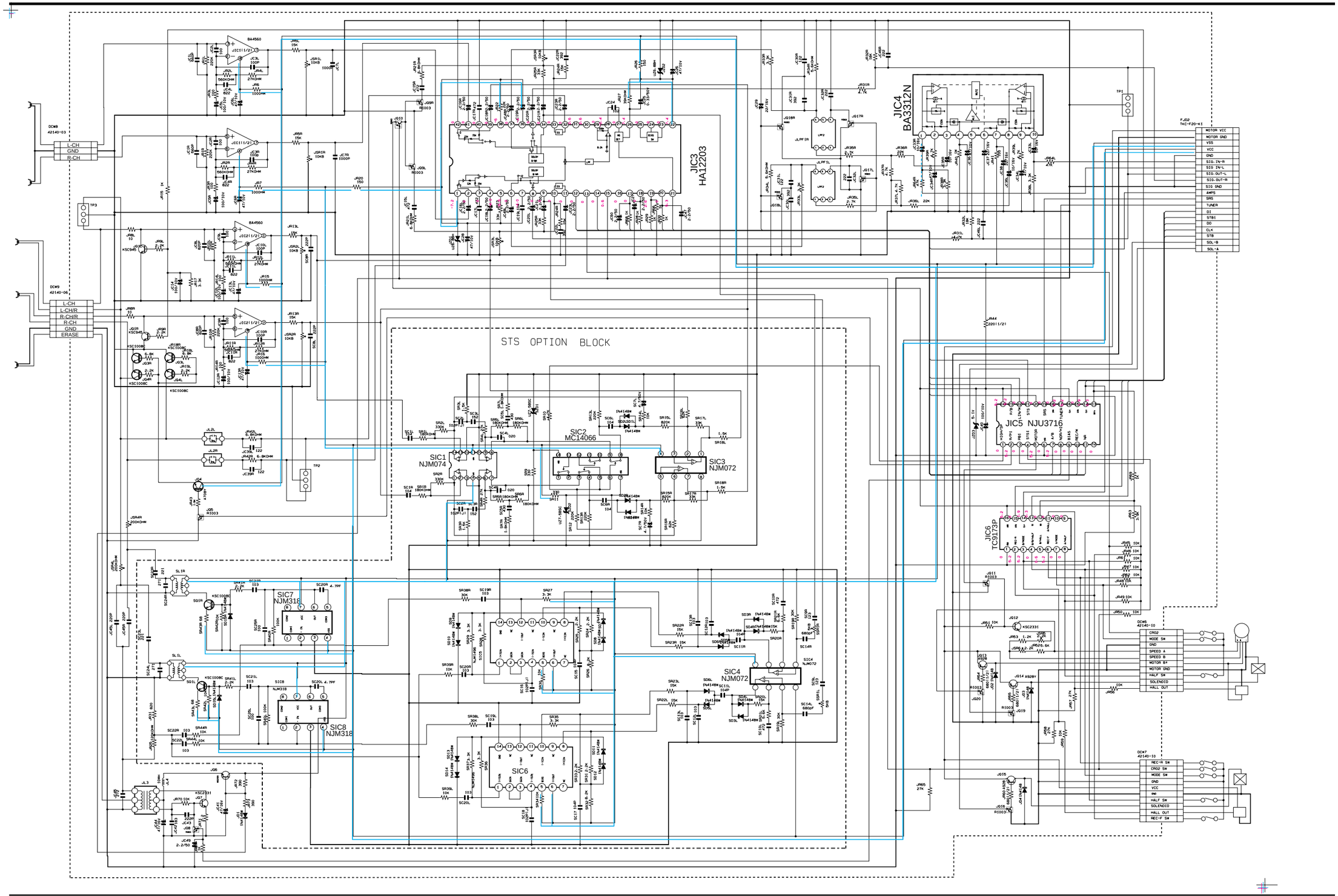
## 12-1 Main



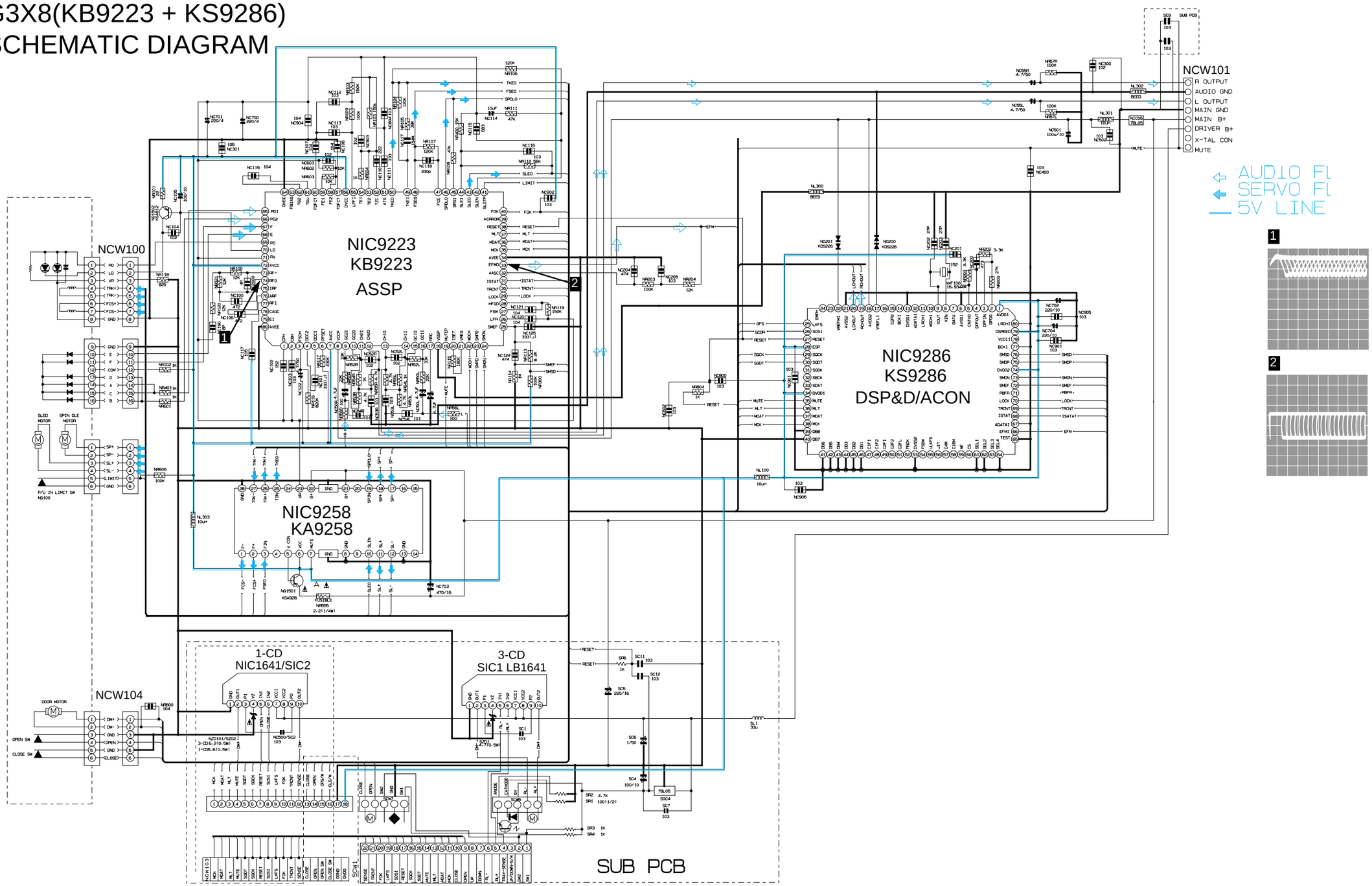
# 12-2 Front


V.F.D
PRO LOGIC OPTION
PRO-LOGIC LED
UIC1
LC866548V-XXXX
UIC2
NJU3718
UIC3
BA3834
UIC4
MSM6654
MIC1
BA4560
FRONT PCB
TO CD
TO VCD
VCD OPTION
POWER PCB
ONLY 110V
ONLY 115V
POWER OPTION
110/220V
115/230V
DUAL VOLT
POWER OPTION
ONLY 220V
ONLY 230V
POWER OPTION
TO DOLBY PROLOGIC
B+
B-

# 12-3 Deck


STS OPTION BLOCK
JIC3
HA12203
JIC4
BA3312N
JIC5
NJU3710
JIC6
TC9173P
SIC1
NJM074
SIC2
MC14066
SIC3
NJM072
SIC4
NJM072
SIC6
SIC7
NJM318
SIC8
NJM318
B4560
KSC1008C
KSC2331
KSC945
L-CH
GND
R-CH
L-CH/R
R-CH/R
ERASE
MOTOR VCC
MOTOR GND
VSS
VCC
GND
SIG. IN-R
SIG. IN-L
SIG. OUT-L
SIG. OUT-R
SIG GND
AMPS
SRS
TUNER
DI
STBI
DO
CLK
STB
SOL-B
SOL-A
REC+R SW
CRO2 SW
MODE SW
GND
VCC
RM
HALF SW
SOLENOID
HALL OUT
REC-F SW

# G3X8(KB9223 + KS9286)
# SCHEMATIC DIAGRAM



## Voltage Table

| IC Name | KB9223 | | KB9223 | | KA9258 | |
|---|---|---|---|---|---|---|
| No. | STOP MODE | PLAY MODE | STOP MODE | PLAY MODE | STOP MODE | PLAY MODE |
| 1 | | | 5V | 5V | 2.5V | 4.5V |
| 2 | | | | | 2.5V | 4.5V |
| 3 | | | | | 2.5V | 2.5V |
| 4 | | | | | | |
| 5 | | | | | 8V | 8V |
| 6 | | | 0V | 0V | 5V | 5V |
| 7 | 5V | 5V | | | 5V | 5V |
| 8 | | | 2.5V | 2.5V | 0V | 0V |
| 9 | | | | | | |
| 10 | | | | | 2.5V | 2.5V |
| 11 | | | | | 2.5V | 4.5V |
| 12 | | | | | 2.5V | 4.5V |
| 13 | | | 0V | 0V | 0V | 0V |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | 2.5V | 2.5V | 2.5V | 4.5V |
| 18 | 0V | 0V | 5V | 5V | 2.5V | 4.5V |
| 19 | 5V | 0V | | | 2.5V | 2.5V |
| 20 | | | | | | |
| 21 | | | 0V | 0V | 8V | 8V |
| 22 | | | 2.5V | 2.5V | 8V | 8V |
| 23 | | | | | 2.5V | 2.5V |
| 24 | 0V | 5V | | | | |
| 25 | | | 0V | 5V | 2.5V | 2.5V |
| 26 | | | | | 2.5V | 4.5V |
| 27 | | | | | 2.5V | 4.5V |
| 28 | | | 0V | 0V | 0V | 0V |
| 29 | | | | | | |
| 30 | | | | | | |
| 31 | | | | | | |
| 32 | | | | | | |
| 33 | | | | | | |
| 34 | 0V | 0V | 5V | 5V | | |
| 35 | | | | | | |
| 36 | | | 5V | 0V | | |
| 37 | | | | | | |
| 38 | 0V | 5V | | | | |
| 39 | | | 0V | 0V | | |
| 40 | 0V | 5V | 0V | 0V | | |

| IC Name | KB9223 | | KB9223 | |
|---|---|---|---|---|
| No. | STOP MODE | PLAY MODE | STOP MODE | PLAY MODE |
| 41 | | | 0V | 0V |
| 42 | | | 0V | 0V |
| 43 | | | 0V | 0V |
| 44 | | | 0V | 0V |
| 45 | | | 0V | 0V |
| 46 | | | 0V | 0V |
| 47 | | | | |
| 48 | | | | |
| 49 | | | | |
| 50 | | | | |
| 51 | | | | |
| 52 | | | | |
| 53 | | | 0V | 0V |
| 54 | | | | |
| 55 | | | | |
| 56 | 5V | 5V | | |
| 57 | | | | |
| 58 | | | | |
| 59 | | | | |
| 60 | | | | |
| 61 | | | 0V | 0V |
| 62 | | | 0V | 0V |
| 63 | | | | |
| 64 | 0V | 0V | 0V | 0V |
| 65 | | | 0V | 0V |
| 66 | | | | |
| 67 | | | 0V | 0V |
| 68 | | | | |
| 69 | | | | |
| 70 | 5V | 3.8V | | |
| 71 | 2.5V | 2.5V | | |
| 72 | 5V | 5V | | |
| 73 | | | 0V | 5V |
| 74 | | | 5V | 5V |
| 75 | | | | |
| 76 | | | | |
| 77 | | | 0V | 0V |
| 78 | | | | |
| 79 | | | 5V | 5V |
| 80 | 0V | 0V | 0V | 0V |

# SERVICE BULLETIN

| | |
|---|---|
| ProDuct : AUDIO | Bulletin No. : 98-AUD-E0003 |
| MODEL : See below | Bulletin Date : Aug 14.1998 |
| Buyer : See attachment | ECN & data : Aug 13.1998 |

SUBJECT : Service Guide for model employed the new speaker

- Application Models : MAX-805,818,838,858(R),868,878,888,858P

Background : Change to new speaker(SS-SPK)

Cause : Change to model name

Solution : Refer to old Service Manual for the service(See below table)

Application Date : Running Change

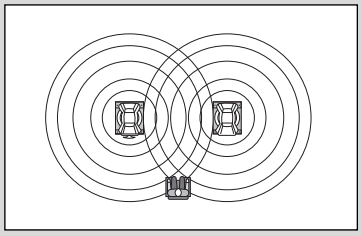
| NO | Old Model Name | New Model Name | Service Manual Code No | Change area | Remark |
|---|---|---|---|---|---|
| 1 | MAX-800 | MAX-805 | AH68-20181A | PS-445 use | -Refer to old Service Manual for the service.(common) |
| 2 | MAX-810 | MAX-818 | AH68-20173A | SS-SPK use | |
| 3 | MAX-820 | MAX-828 | AH68-20186A | SS-SPK use | |
| 4 | MAX-830 | MAX-838 | AH68-20186A | SS-SPK use | |
| 5 | MAX-850(R) | MAX-858(R) | AH68-20176A | SS-SPK use | -Space Surround Speaker (SS-SPK) |
| 6 | MAX-852P | MAX-858P | AH68-20195A | SS-SPK use | |
| 7 | MAX-860 | MAX-868 | AH68-20176A | SS-SPK use | ⇒ Refer to next page |
| 8 | MAX-870 | MAX-878 | AH68-20177A | SS-SPK use | |
| 9 | MAX-880 | MAX-888 | AH68-20177A | SS-SPK use | |

Attachment Schematic Diagram ( ) Component Lay-out ( ) Schematic Diagram ( )
Mechanical Diagram( ) None ( ) Others ( o )

| Published by : | Checked by : | Approved by : |
|---|---|---|

## To get the most effective stereo sound

- If possible, position the height of the tweeter of the speaker system at the same height of the ears of the listener to enjoy richer sound.
- It differs according to the structure of the room. Place the speakers at the various positions to find out the optimum position. Then you will enjoy better sound.

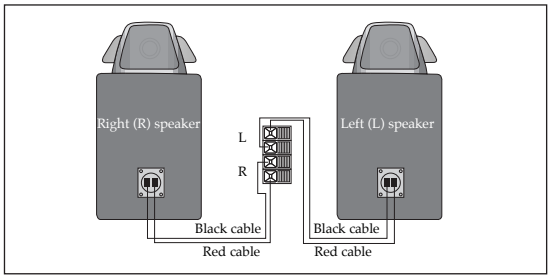


## Maintenance

- Clean the system with a soft cloth applied with mild detergent or water.
- Do not use thinner, alcohol, or benzene, which peels off the paint or makes stains on the surface.

## Connecting the speakers

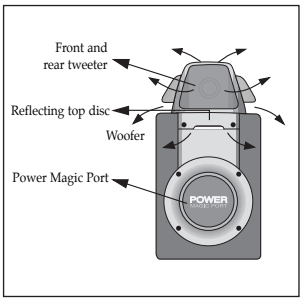
- Turn the power of the amplifier off before connecting the speakers.
- Connect the speakers using the cable enclosed with the speakers as the figure shown below. The red cable should be connected to the red terminal on both the speaker and the amplifier and the black cable to the black terminal on both. Besides, the left(L) and right(R) should be matched.
- Connect the speaker cable to the terminal accurately. If it is connected inaccurately, there may be no sound or noisy sound. Furthermore, if the +, – cables touched each other, the amplifier may be damaged.
- If the polarity of the connection is reversed, the sound quality will be lowered badly and the stereo sound will not be produced owing to the phase condition of the left and the right. Take great care to connect the speakers in phase.




## About the 360° Space Surround

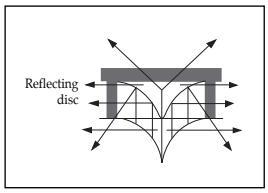
### The 360° Space Surround Speaker System

- reproduces the sound of the musical instrument more naturally than the regular speakers.
- It is because that this speaker system reproduces the sound on the same principle as the resounding of the musical instrument.



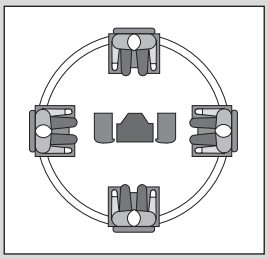

### Reflecting top disc

- reflects the sound uniformly in all direction. Therefore, you can hear the same sound all around the speaker system.



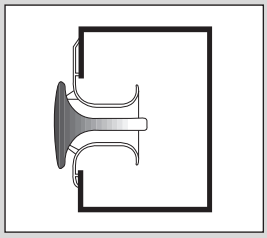

### The 360° Space Surround Speaker System

- provides all the listeners around the speaker system with the same quality and volume of the sound.



### Power Magic Port™

- reproduces the rich and dynamic bass sound. Especially, by the dynamic range of the medium and low frequency response, the noise generated through the port is reduced effectively to reproduce the clear bass sound.



※ Power Port™ is the patent of Polk Audio in U.S.A. Samsung Electronic has the manufacturing license to produce it.

*Note : Design and Specfication are subject to change upon improvement without prior notice.